

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	26APR2013 00:21:55
Data source version	GOMOS/6.01
Start time of products	27-12-2008 (27DEC2008 00:00:00)
Stop time of products	28-12-2008 (28DEC2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	423
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

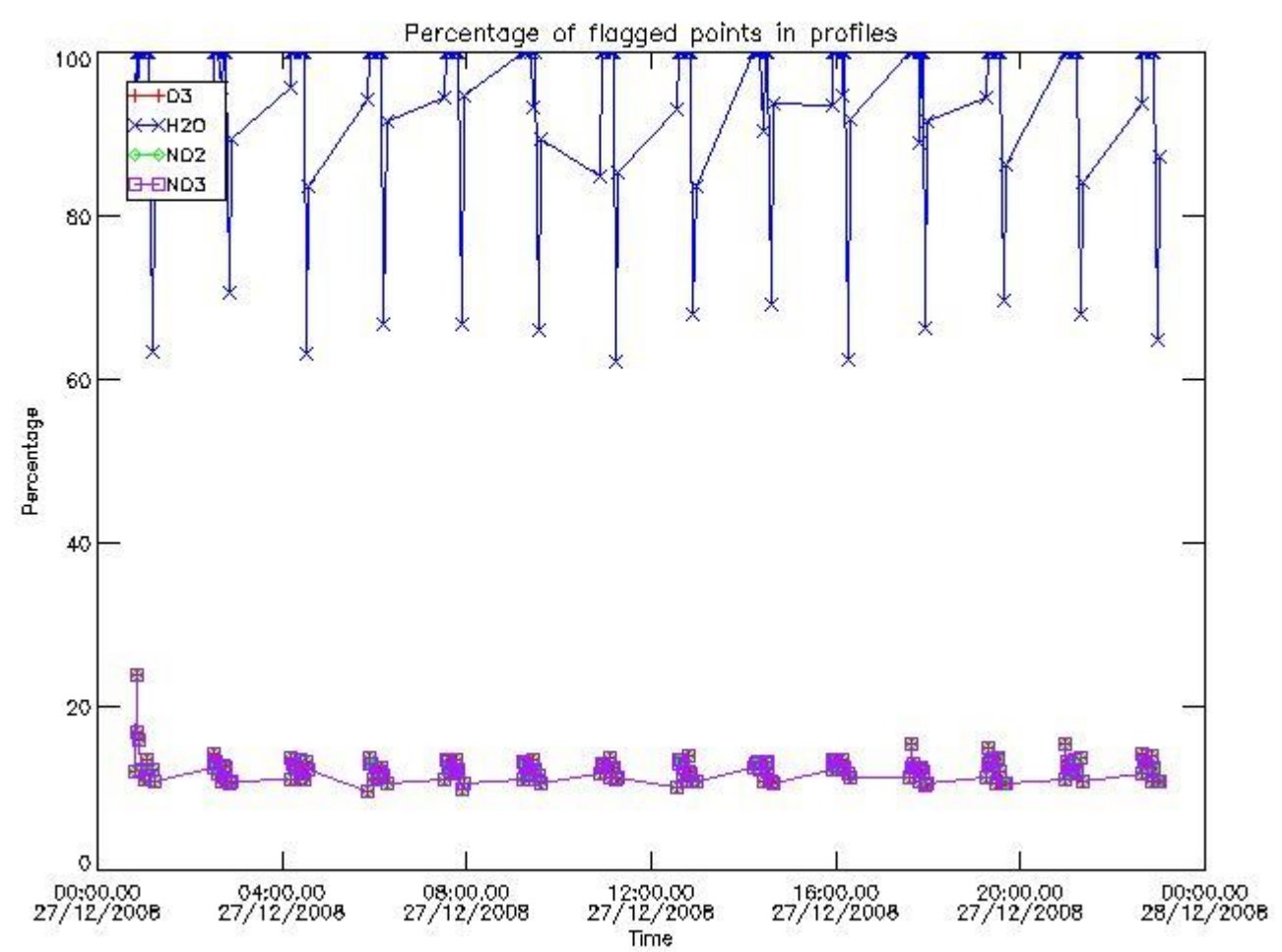
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081227_001116_000000362075_00059_35684_3362.N1	27-DEC-2008 00:11:16	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	35684	No
2	GOM_NL__2PRFIN20081227_001550_000000392075_00059_35684_3363.N1	27-DEC-2008 00:15:50	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	35684	No
3	GOM_NL__2PRFIN20081227_001930_000000342075_00059_35684_3364.N1	27-DEC-2008 00:19:30	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	35684	No
4	GOM_NL__2PRFIN20081227_002643_000000392075_00059_35684_3365.N1	27-DEC-2008 00:26:43	Bright	39.000	180	27Gam Boo	3.0400	8000.0	78	35684	No
5	GOM_NL__2PRFIN20081227_003013_000000392075_00059_35684_3366.N1	27-DEC-2008 00:30:13	Bright	38.500	83		2.3780	11000.	77	35684	No
6	GOM_NL__2PRFIN20081227_003525_000000352075_00059_35684_3367.N1	27-DEC-2008 00:35:25	Bright	34.500	102	24Alp Ser	2.6000	4250.0	69	35684	No
7	GOM_NL__2PRFIN20081227_004019_000000542075_00059_35684_3368.N1	27-DEC-2008 00:40:19	Bright	54.000	104	27Bet Lib	2.6140	13100.	108	35684	No
8	GOM_NL__2PRFIN20081227_004249_000000402075_00059_35684_3369.N1	27-DEC-2008 00:42:49	Bright	40.000	122	9Alp2Lib	2.7470	9700.0	80	35684	No
9	GOM_NL__2PRFIN20081227_004934_000000432075_00059_35684_3370.N1	27-DEC-2008 00:49:34	Dark	42.500	54	5The Cen	2.0550	4500.0	85	35684	No
10	GOM_NL__2PRFIN20081227_005108_000000392075_00059_35684_3371.N1	27-DEC-2008 00:51:08	Dark	38.500	78	Alp Lup	2.3040	28000.	77	35684	No
11	GOM_NL__2PRFIN20081227_005226_000000402075_00059_35684_3372.N1	27-DEC-2008 00:52:26	Dark	39.500	95	Zet Cen	2.5450	26000.	79	35684	No
12	GOM_NL__2PRFIN20081227_005413_000000392075_00059_35684_3373.N1	27-DEC-2008 00:54:13	Dark	38.500	77	Eps Cen	2.3030	28000.	77	35684	No
13	GOM_NL__2PRFIN20081227_005542_000000422075_00060_35685_3359.N1	27-DEC-2008 00:55:42	Dark	41.500	64	Gam Cen	2.2000	10600.	83	35685	No
14	GOM_NL__2PRFIN20081227_010144_000000462075_00060_35685_3360.N1	27-DEC-2008 01:01:44	Dark	46.000	113	Mu Vel	2.6920	5000.0	92	35685	No
15	GOM_NL__2PRFIN20081227_010331_000000382075_00060_35685_3361.N1	27-DEC-2008 01:03:31	Dark	37.500	29	Bet Car	1.6720	10200.	75	35685	No
16	GOM_NL__2PRFIN20081227_010508_000000422075_00060_35685_3362.N1	27-DEC-2008 01:05:08	Dark	41.500	91	Kap Vel	2.4900	26000.	83	35685	No
17	GOM_NL__2PRFIN20081227_010636_000000452075_00060_35685_3363.N1	27-DEC-2008 01:06:36	Dark	44.500	46	Del Vel	1.9540	10600.	89	35685	No
18	GOM_NL__2PRFIN20081227_011048_000000462075_00060_35685_3364.N1	27-DEC-2008 01:10:48	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	35685	No
19	GOM_NL__2PRFIN20081227_011355_000000472075_00060_35685_3365.N1	27-DEC-2008 01:13:55	Dark	47.000	117	Pi Pup	2.7060	3800.0	94	35685	No
20	GOM_NL__2PRFIN20081227_011650_000000462075_00060_35685_3366.N1	27-DEC-2008 01:16:50	Straylight	46.000	23	21Eps CMa	1.5020	26000.	92	35685	No
21	GOM_NL__2PRFIN20081227_011827_000000382075_00060_35685_3367.N1	27-DEC-2008 01:18:27	Straylight	38.000	179	24Omi2CMa	3.0320	24000.	76	35685	No
22	GOM_NL__2PRFIN20081227_012102_000000512075_00060_35685_3368.N1	27-DEC-2008 01:21:02	Straylight	50.500	1	9Alp CMa	-1.4400	11000.	101	35685	No
23	GOM_NL__2PRFIN20081227_012410_000000452075_00060_35685_3369.N1	27-DEC-2008 01:24:10	Straylight	45.000	7	19Bet Ori	0.10000	14000.	90	35685	No
24	GOM_NL__2PRFIN20081227_012608_000000422075_00060_35685_3370.N1	27-DEC-2008 01:26:08	Straylight	41.500	30	46Eps Ori	1.6940	30000.	83	35685	No
25	GOM_NL__2PRFIN20081227_012848_000000582075_00060_35685_3371.N1	27-DEC-2008 01:28:48	Tw_i_and_stray	58.000	14	58Alp Ori	0.87000	3000.0	116	35685	No
26	GOM_NL__2PRFIN20081227_013121_000000472075_00060_35685_3372.N1	27-DEC-2008 01:31:21	Bright	46.500	13	87Alp Tau	0.86700	3800.0	93	35685	No
27	GOM_NL__2PRFIN20081227_013249_000000402075_00060_35685_3373.N1	27-DEC-2008 01:32:49	Bright	39.500	176	23Zet Tau	3.0200	22000.	79	35685	No
28	GOM_NL__2PRFIN20081227_013454_000000392075_00060_35685_3374.N1	27-DEC-2008 01:34:54	Bright	38.500	28	12Bet Tau	1.6500	15200.	77	35685	No
29	GOM_NL__2PRFIN20081227_013756_000000402075_00060_35685_3375.N1	27-DEC-2008 01:37:56	Bright	39.500	107	37The Aur	2.6490	11000.	79	35685	No
30	GOM_NL__2PRFIN20081227_013950_000000412075_00060_35685_3376.N1	27-DEC-2008 01:39:50	Bright	40.500	6	13Alp Aur	0.080000	3400.0	81	35685	No
31	GOM_NL__2PRFIN20081227_015152_000000322075_00060_35685_3377.N1	27-DEC-2008 01:51:52	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	35685	No
32	GOM_NL__2PRFIN20081227_015626_000000332075_00060_35685_3378.N1	27-DEC-2008 01:56:26	Bright	33.000	60	7Bet UMi	2.0810	3950.0	66	35685	No
33	GOM_NL__2PRFIN20081227_020006_000000372075_00060_35685_3379.N1	27-DEC-2008 02:00:06	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	35685	No
34	GOM_NL__2PRFIN20081227_020719_000000392075_00060_35685_3380.N1	27-DEC-2008 02:07:19	Bright	38.500	180	27Gam Boo	3.0400	8000.0	77	35685	No
35	GOM_NL__2PRFIN20081227_021049_000000402075_00060_35685_3381.N1	27-DEC-2008 02:10:49	Bright	40.000	83		2.3780	11000.	80	35685	No
36	GOM_NL__2PRFIN20081227_021601_000000342075_00060_35685_3382.N1	27-DEC-2008 02:16:01	Bright	33.500	102	24Alp Ser	2.6000	4250.0	67	35685	No
37	GOM_NL__2PRFIN20081227_022055_000000542075_00060_35685_3383.N1	27-DEC-2008 02:20:55	Bright	54.000	104	27Bet Lib	2.6140	13100.	108	35685	No
38	GOM_NL__2PRFIN20081227_022326_000000412075_00060_35685_3384.N1	27-DEC-2008 02:23:26	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	35685	No
39	GOM_NL__2PRFIN20081227_023011_000000492075_00060_35685_3385.N1	27-DEC-2008 02:30:11	Dark	48.500	54	5The Cen	2.0550	4500.0	97	35685	No
40	GOM_NL__2PRFIN20081227_023145_000000402075_00060_35685_3386.N1	27-DEC-2008 02:31:45	Dark	39.500	78	Alp Lup	2.3040	28000.	79	35685	No
41	GOM_NL__2PRFIN20081227_023302_000000392075_00060_35685_3387.N1	27-DEC-2008 02:33:02	Dark	38.500	95	Zet Cen	2.5450	26000.	77	35685	No
42	GOM_NL__2PRFIN20081227_023450_000000392075_00060_35685_3388.N1	27-DEC-2008 02:34:50	Dark	39.000	77	Eps Cen	2.3030	28000.	78	35685	No

397	GOM_NL__2PRFIN20081227_223729_000000482075_00072_35697_3551.N1	27-DEC-2008 22:37:29	Dark	47.500	54	5The Cen	2.0550	4500.0	95	35697	No
398	GOM_NL__2PRFIN20081227_223901_000000402075_00072_35697_3552.N1	27-DEC-2008 22:39:01	Dark	39.500	78	Alp Lup	2.3040	28000.	79	35697	No
399	GOM_NL__2PRFIN20081227_224020_000000392075_00072_35697_3553.N1	27-DEC-2008 22:40:20	Dark	38.500	95	Zet Cen	2.5450	26000.	77	35697	No
400	GOM_NL__2PRFIN20081227_224207_000000412075_00072_35697_3554.N1	27-DEC-2008 22:42:07	Dark	40.500	77	Eps Cen	2.3030	28000.	81	35697	No
401	GOM_NL__2PRFIN20081227_224339_000000412075_00073_35698_3543.N1	27-DEC-2008 22:43:39	Dark	41.000	64	Gam Cen	2.2000	10600.	82	35698	No
402	GOM_NL__2PRFIN20081227_224943_000000472075_00073_35698_3544.N1	27-DEC-2008 22:49:43	Dark	47.000	113	Mu Vel	2.6920	5000.0	94	35698	No
403	GOM_NL__2PRFIN20081227_225123_000000372075_00073_35698_3545.N1	27-DEC-2008 22:51:23	Dark	36.500	29	Bet Car	1.6720	10200.	73	35698	No
404	GOM_NL__2PRFIN20081227_225304_000000412075_00073_35698_3546.N1	27-DEC-2008 22:53:04	Dark	41.000	91	Kap Vel	2.4900	26000.	82	35698	No
405	GOM_NL__2PRFIN20081227_225430_000000422075_00073_35698_3547.N1	27-DEC-2008 22:54:30	Dark	41.500	46	Del Vel	1.9540	10600.	83	35698	No
406	GOM_NL__2PRFIN20081227_225839_000000482075_00073_35698_3548.N1	27-DEC-2008 22:58:39	Dark	47.500	2	Alp Car	-0.73600	7000.0	95	35698	No
407	GOM_NL__2PRFIN20081227_230147_000000482075_00073_35698_3549.N1	27-DEC-2008 23:01:47	Dark	47.500	117	Pi Pup	2.7060	3800.0	95	35698	No
408	GOM_NL__2PRFIN20081227_230441_000000472075_00073_35698_3550.N1	27-DEC-2008 23:04:41	Straylight	47.000	23	21Eps CMa	1.5020	26000.	94	35698	No
409	GOM_NL__2PRFIN20081227_230617_000000402075_00073_35698_3551.N1	27-DEC-2008 23:06:17	Straylight	40.000	179	24Omi2CMa	3.0320	24000.	80	35698	No
410	GOM_NL__2PRFIN20081227_230851_000000472075_00073_35698_3552.N1	27-DEC-2008 23:08:51	Straylight	47.000	1	9Alp CMa	-1.4400	11000.	94	35698	No
411	GOM_NL__2PRFIN20081227_231159_000000462075_00073_35698_3553.N1	27-DEC-2008 23:11:59	Straylight	45.500	7	19Bet Ori	0.10000	14000.	91	35698	No
412	GOM_NL__2PRFIN20081227_231355_000000422075_00073_35698_3554.N1	27-DEC-2008 23:13:55	Straylight	41.500	30	46Eps Ori	1.6940	30000.	83	35698	No
413	GOM_NL__2PRFIN20081227_231633_000000572075_00073_35698_3555.N1	27-DEC-2008 23:16:33	Twilight_stray	57.000	14	58Alp Ori	0.87000	3000.0	114	35698	No
414	GOM_NL__2PRFIN20081227_231910_000000522075_00073_35698_3556.N1	27-DEC-2008 23:19:10	Bright	52.000	13	87Alp Tau	0.86700	3800.0	104	35698	No
415	GOM_NL__2PRFIN20081227_232033_000000412075_00073_35698_3557.N1	27-DEC-2008 23:20:33	Bright	41.000	176	23Zet Tau	3.0200	22000.	82	35698	No
416	GOM_NL__2PRFIN20081227_232239_000000402075_00073_35698_3558.N1	27-DEC-2008 23:22:39	Bright	40.000	28	12Bet Tau	1.6500	15200.	80	35698	No
417	GOM_NL__2PRFIN20081227_232539_000000392075_00073_35698_3559.N1	27-DEC-2008 23:25:39	Bright	39.000	107	37The Aur	2.6490	11000.	78	35698	No
418	GOM_NL__2PRFIN20081227_232735_000000422075_00073_35698_3560.N1	27-DEC-2008 23:27:35	Bright	42.000	6	13Alp Aur	0.080000	3400.0	84	35698	No
419	GOM_NL__2PRFIN20081227_233939_000000362075_00073_35698_3561.N1	27-DEC-2008 23:39:39	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	35698	No
420	GOM_NL__2PRFIN20081227_234412_000000382075_00073_35698_3562.N1	27-DEC-2008 23:44:12	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	35698	No
421	GOM_NL__2PRFIN20081227_234755_000000372075_00073_35698_3563.N1	27-DEC-2008 23:47:55	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	35698	No
422	GOM_NL__2PRFIN20081227_235506_000000392075_00073_35698_3564.N1	27-DEC-2008 23:55:06	Bright	39.000	180	27Gam Boo	3.0400	8000.0	78	35698	No
423	GOM_NL__2PRFIN20081227_235839_000000592075_00073_35698_3565.N1	27-DEC-2008 23:58:39	Bright	59.000	83		2.3780	11000.	118	35698	No

3. Quality information per product

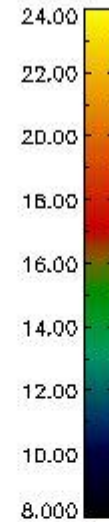
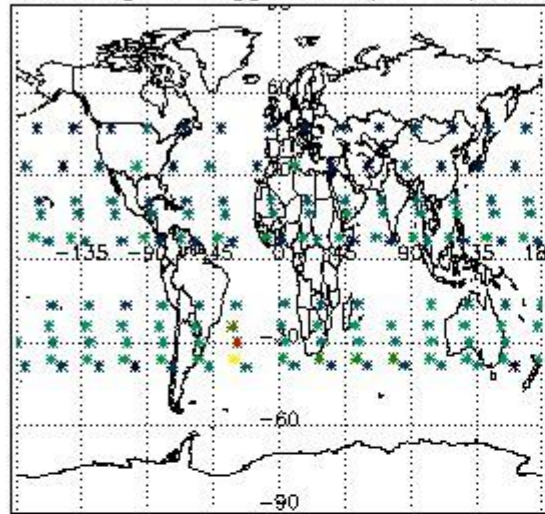
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

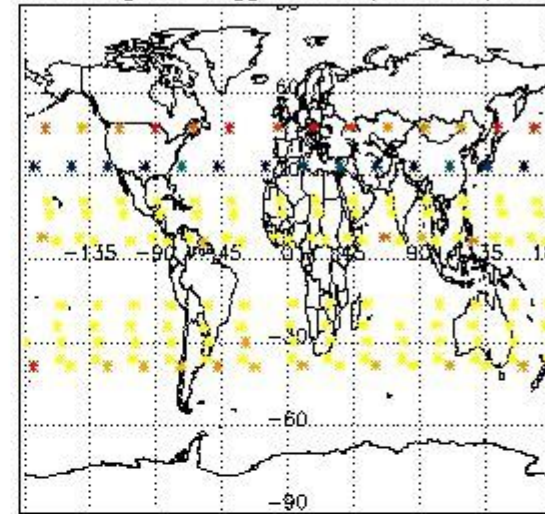


3.2 Plot quality information per product (world map)

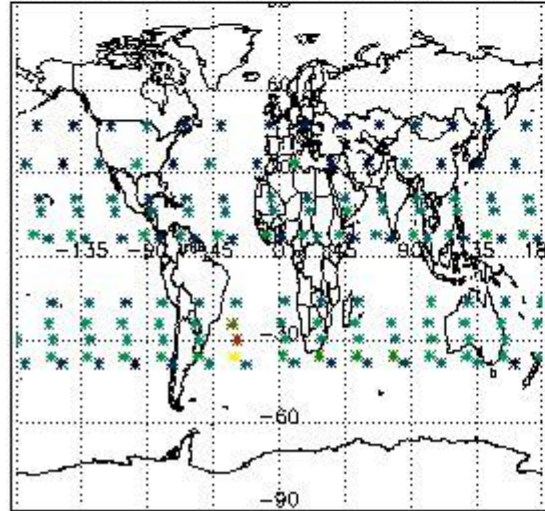
Percentage of flagged data per O3 profile



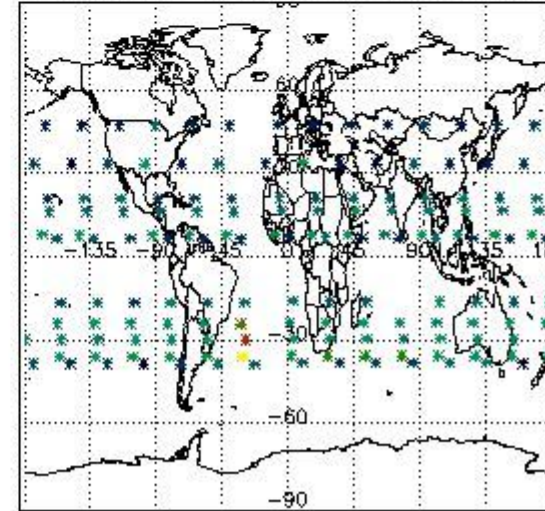
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

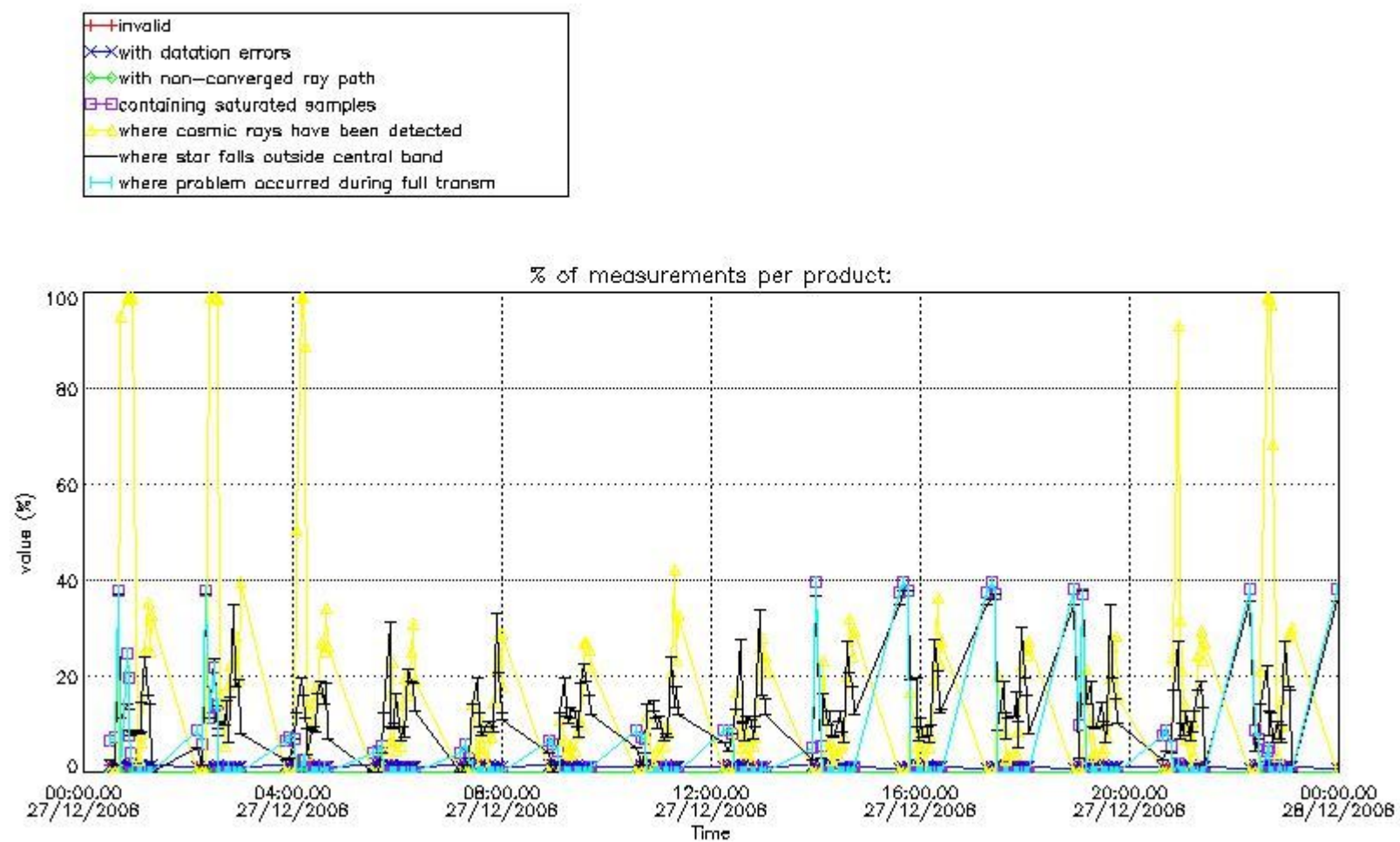


4. Level 1 quality information per product

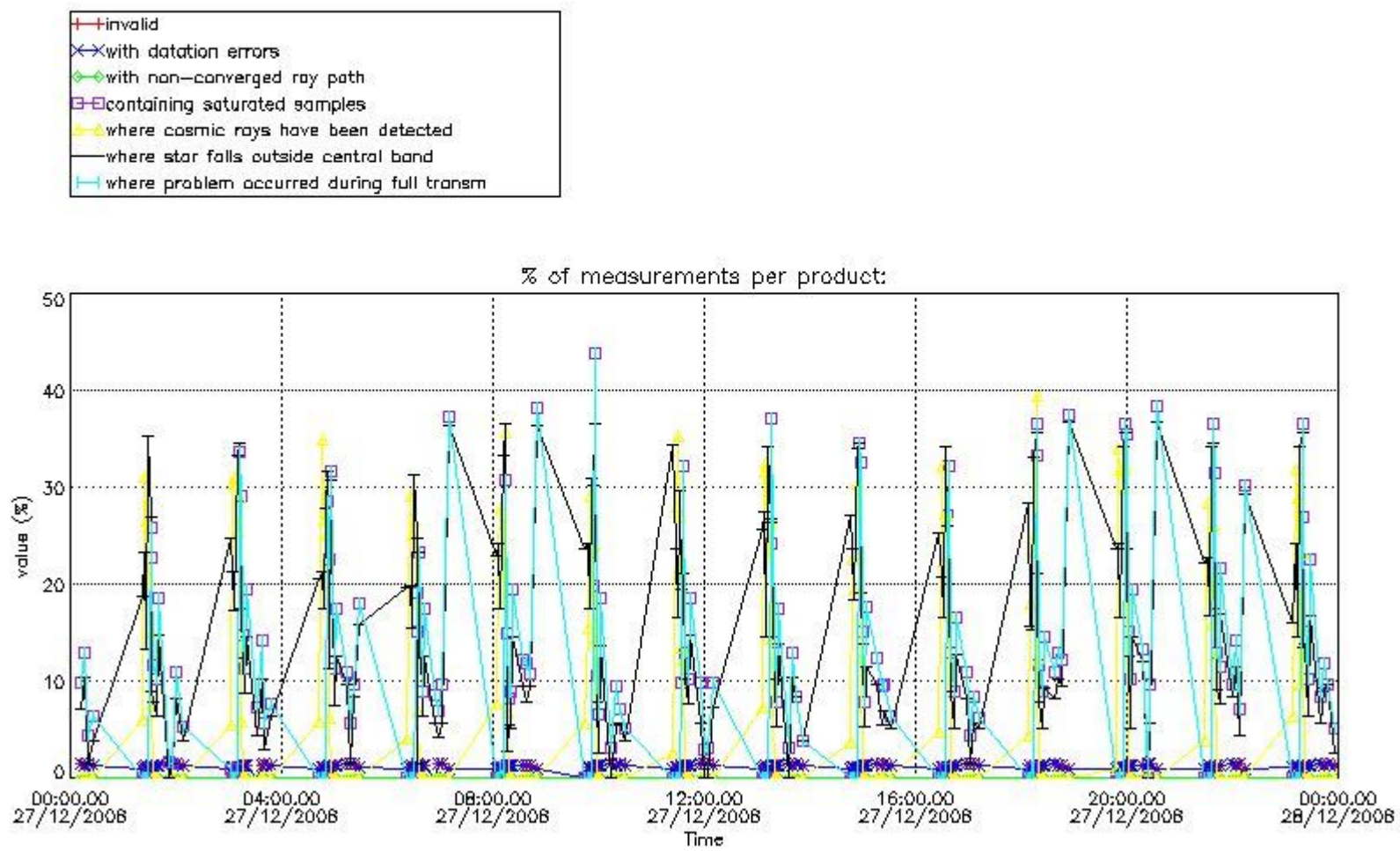
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



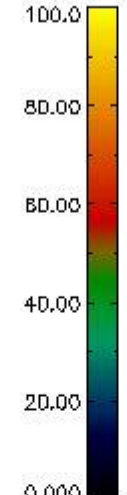
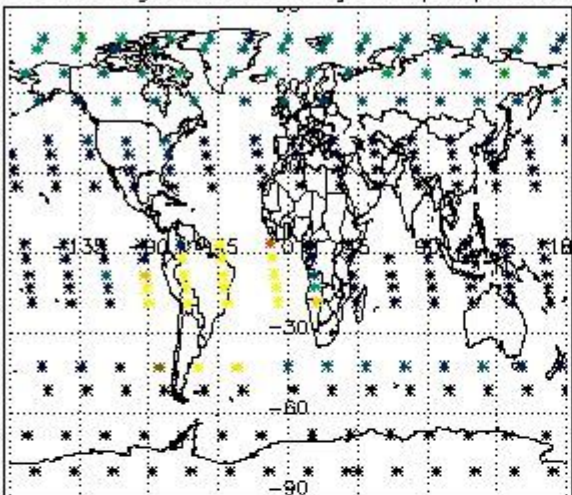
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



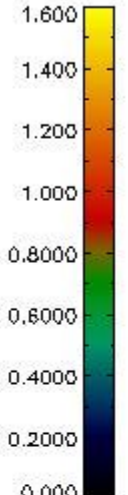
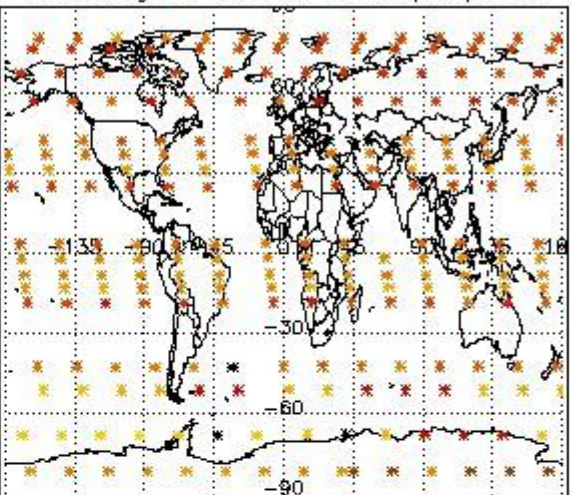
4.2 Plot quality information per product coming from level 1b processing (world map)

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

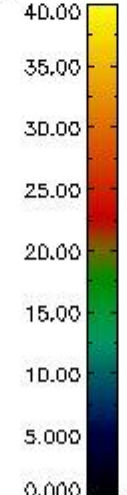
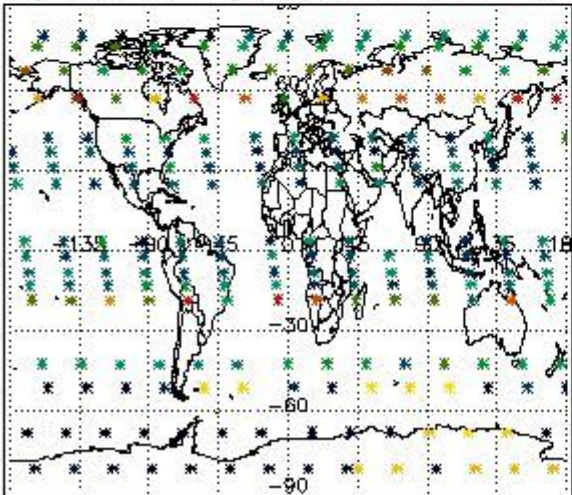
Percentage of cosmic ray hits per profile



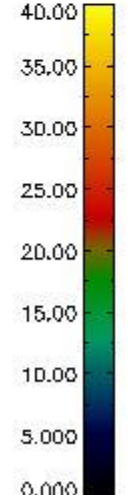
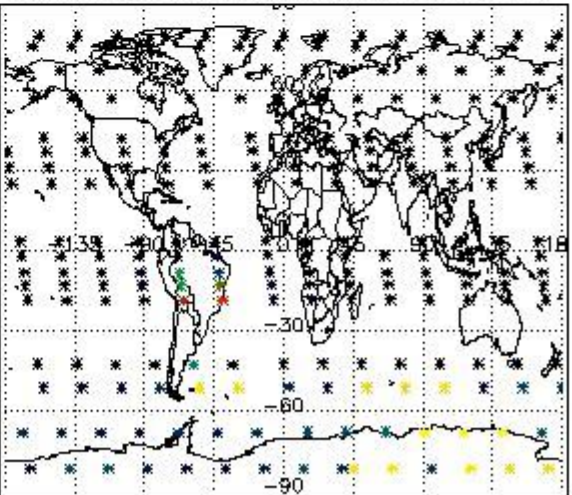
Percentage of datation errors per profile



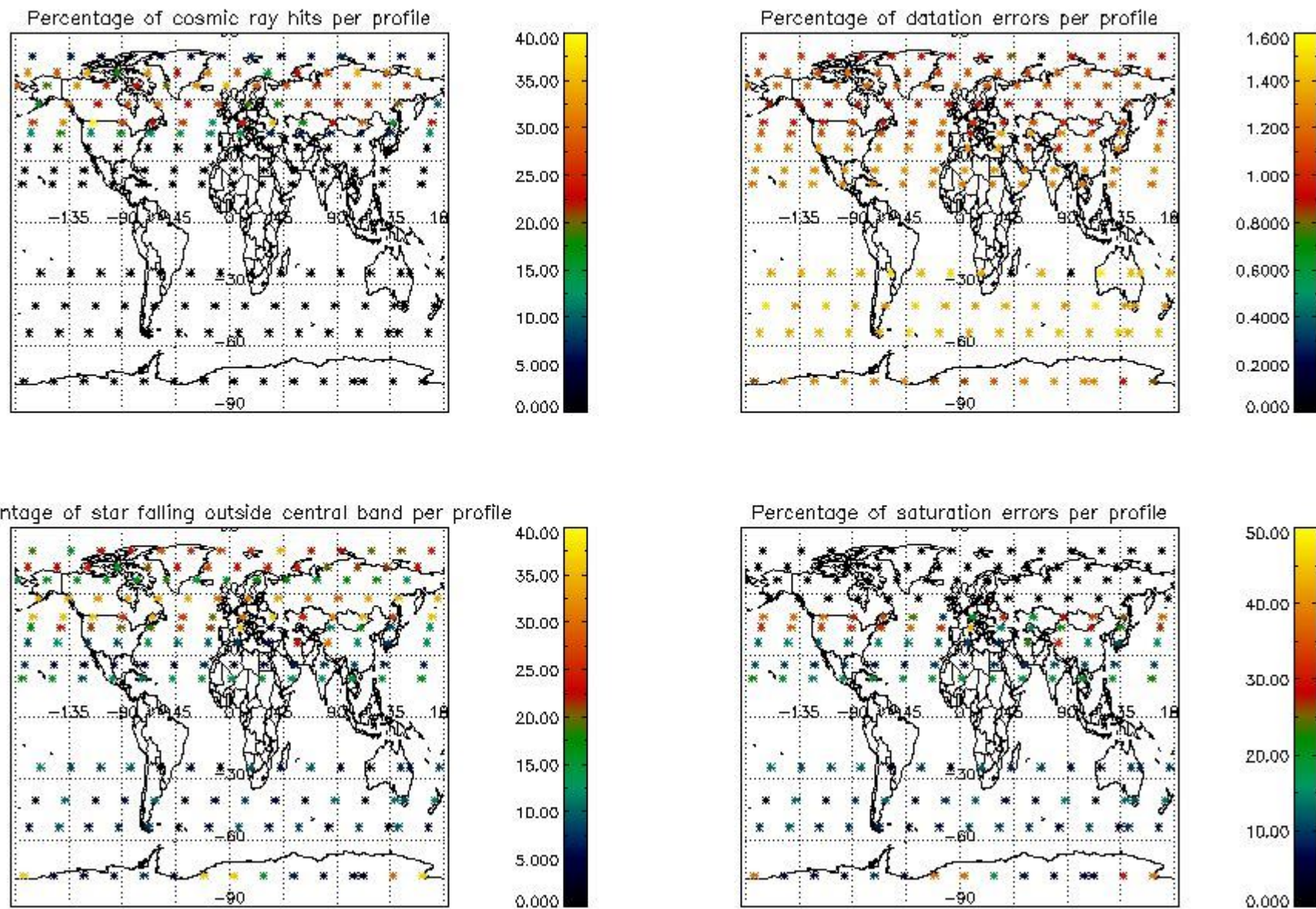
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

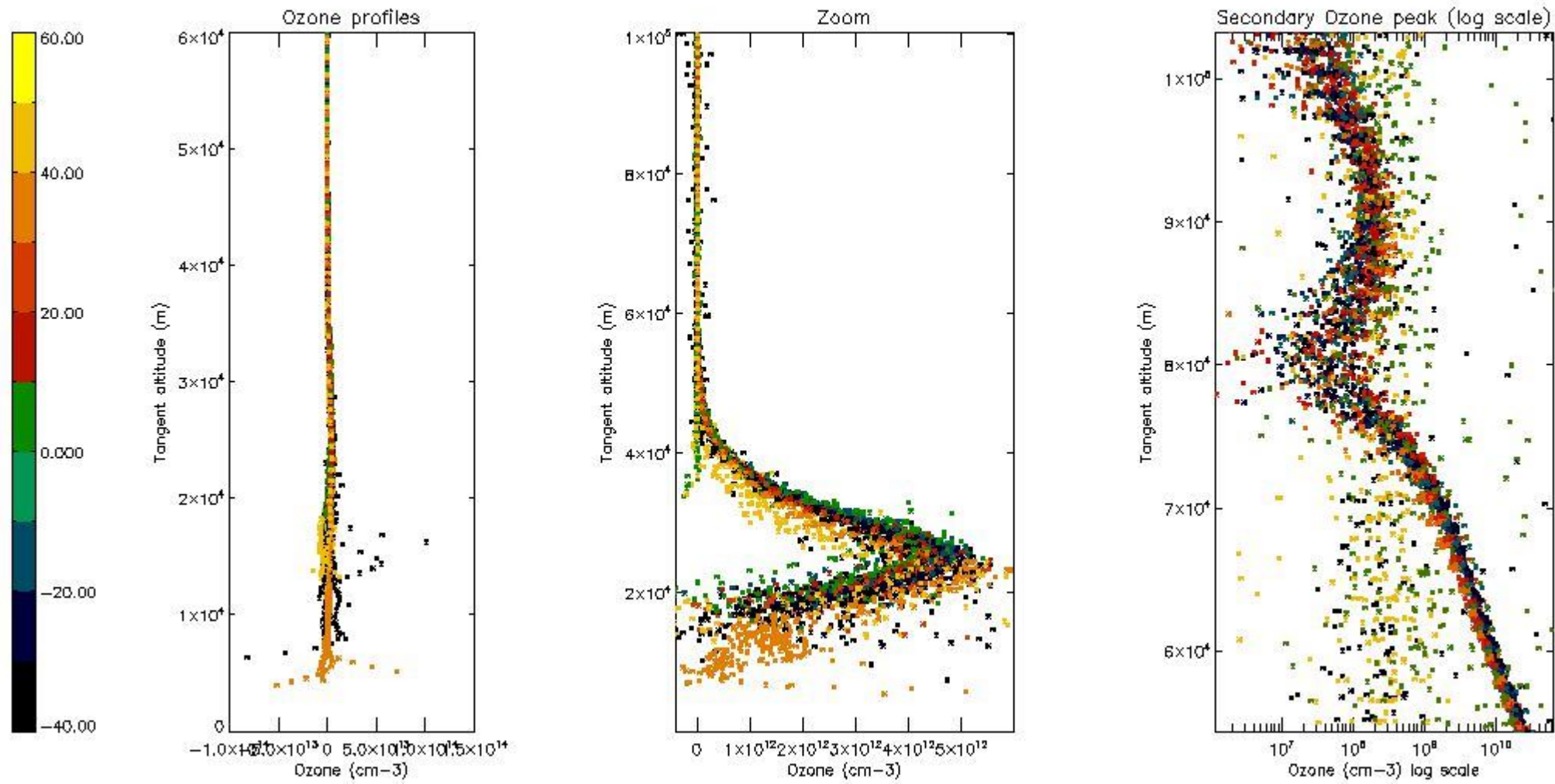
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	18

STD < 10	14
STD < 5	9

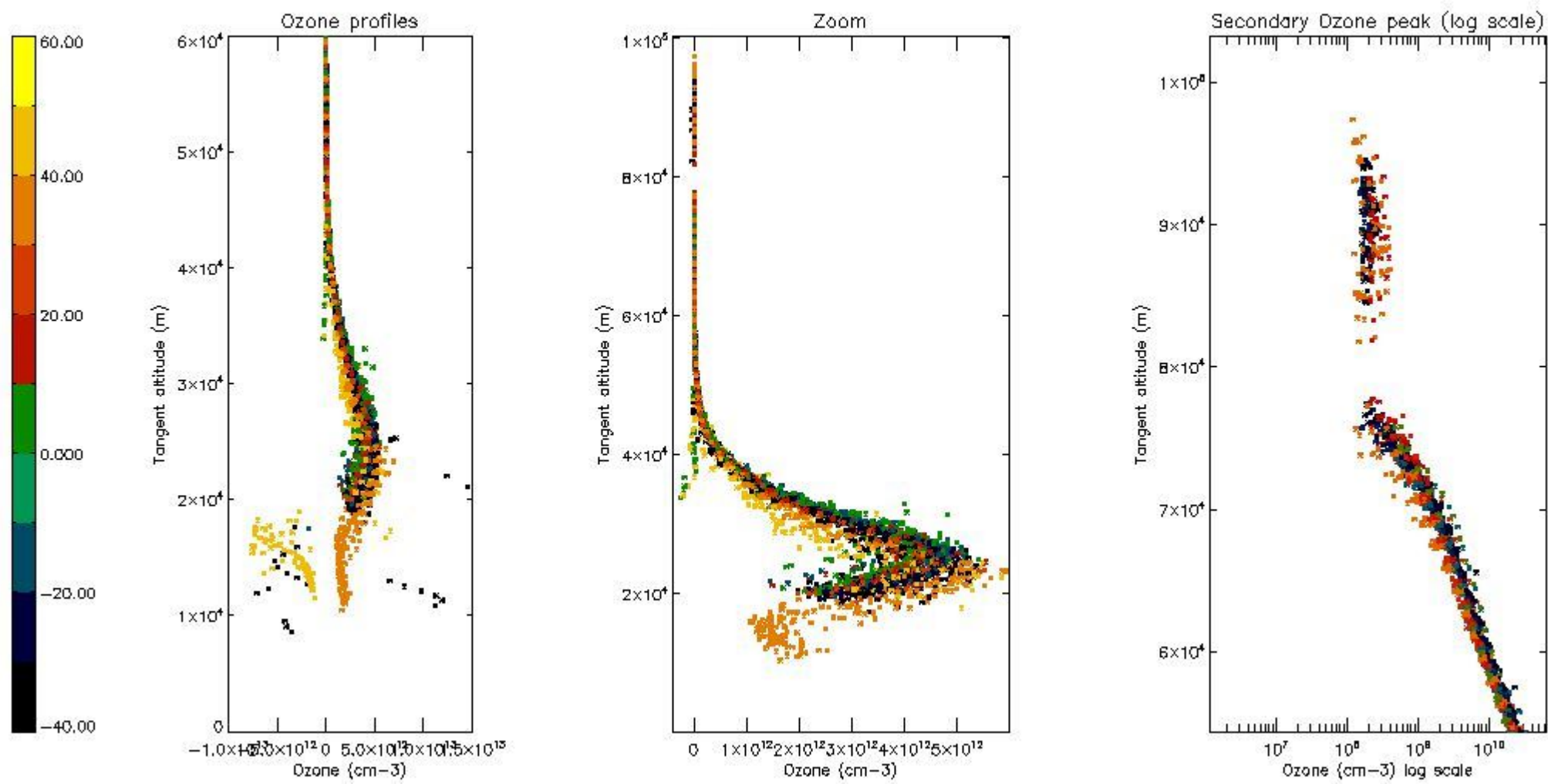
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



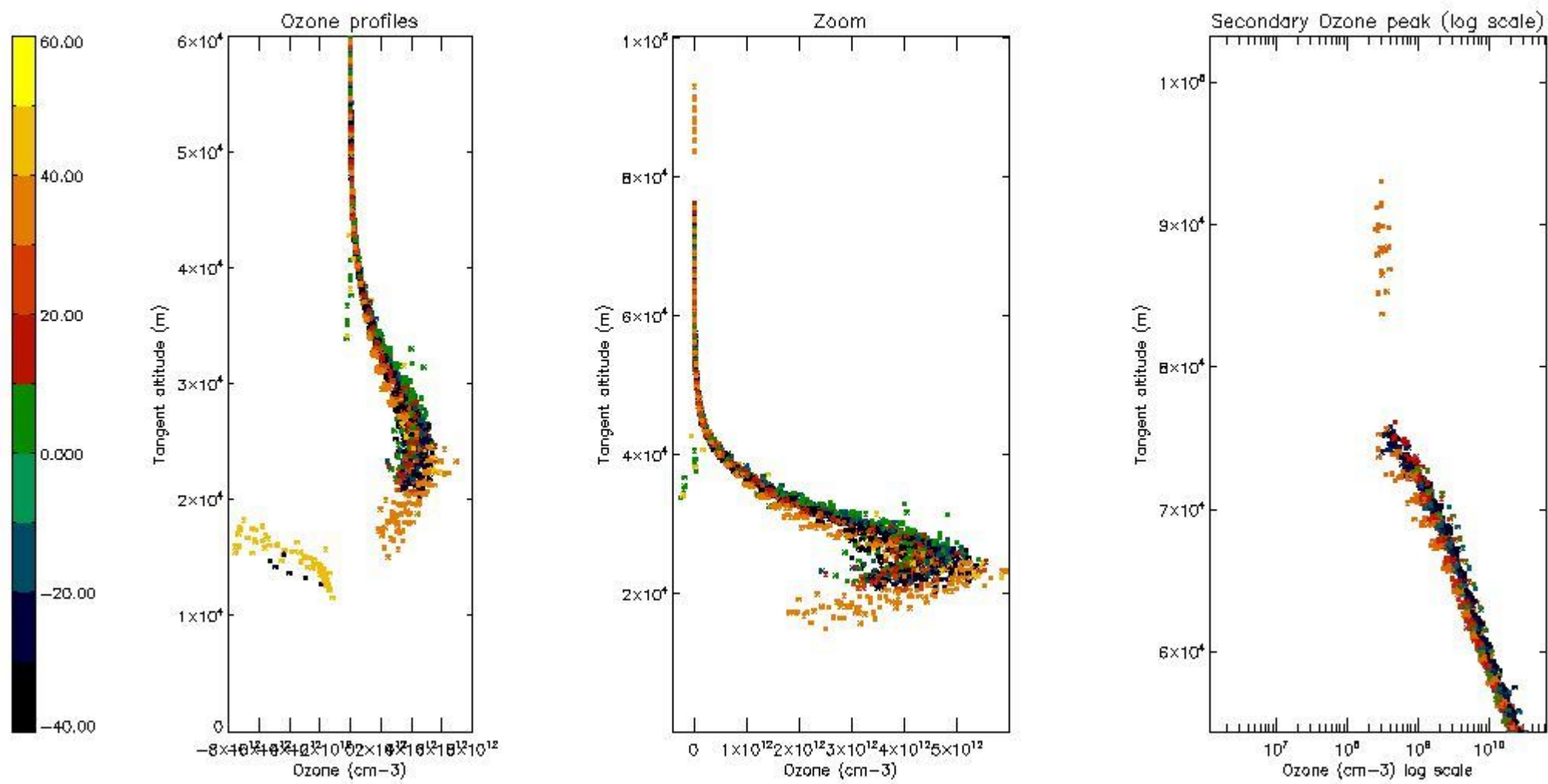
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



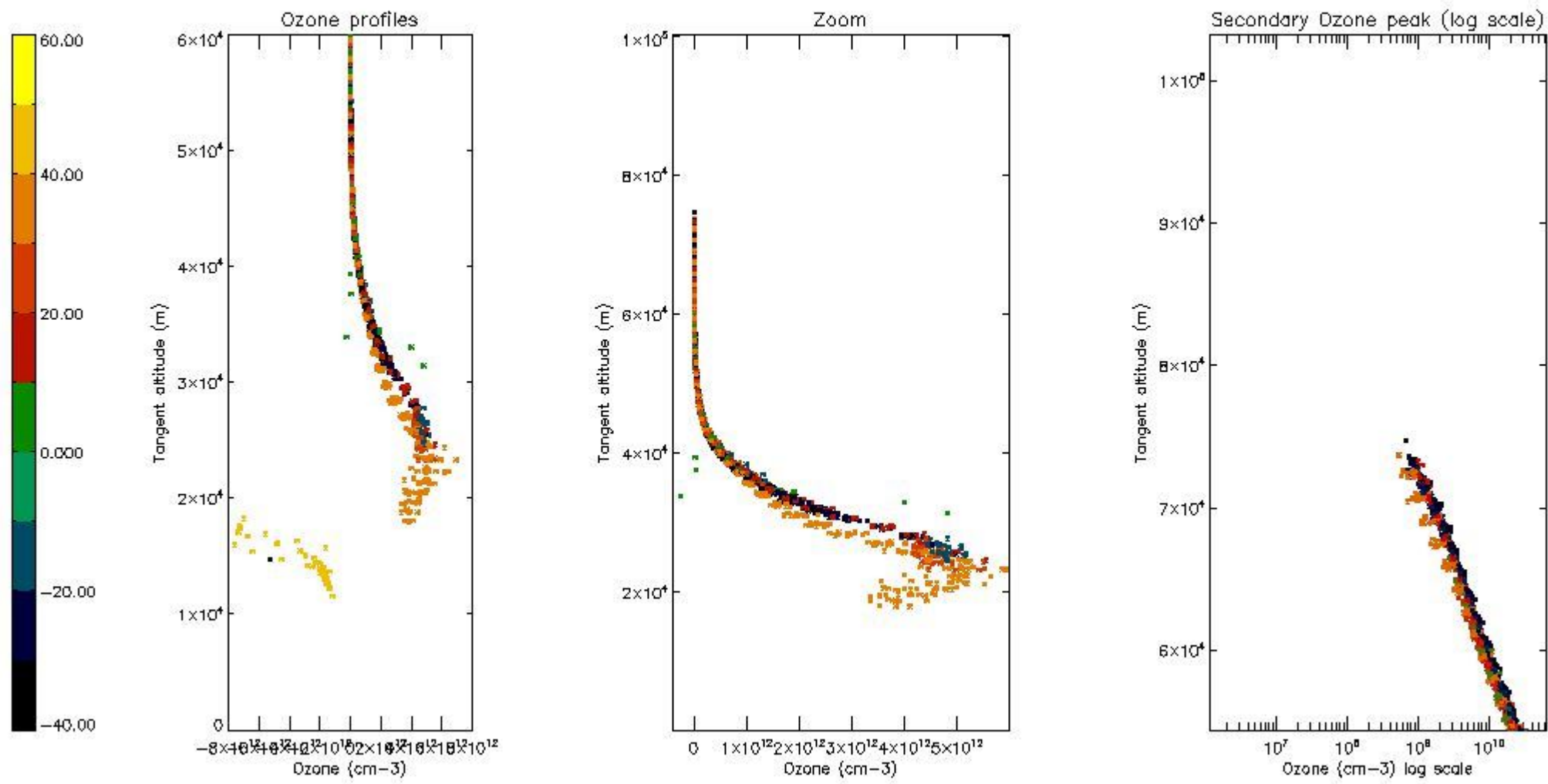
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



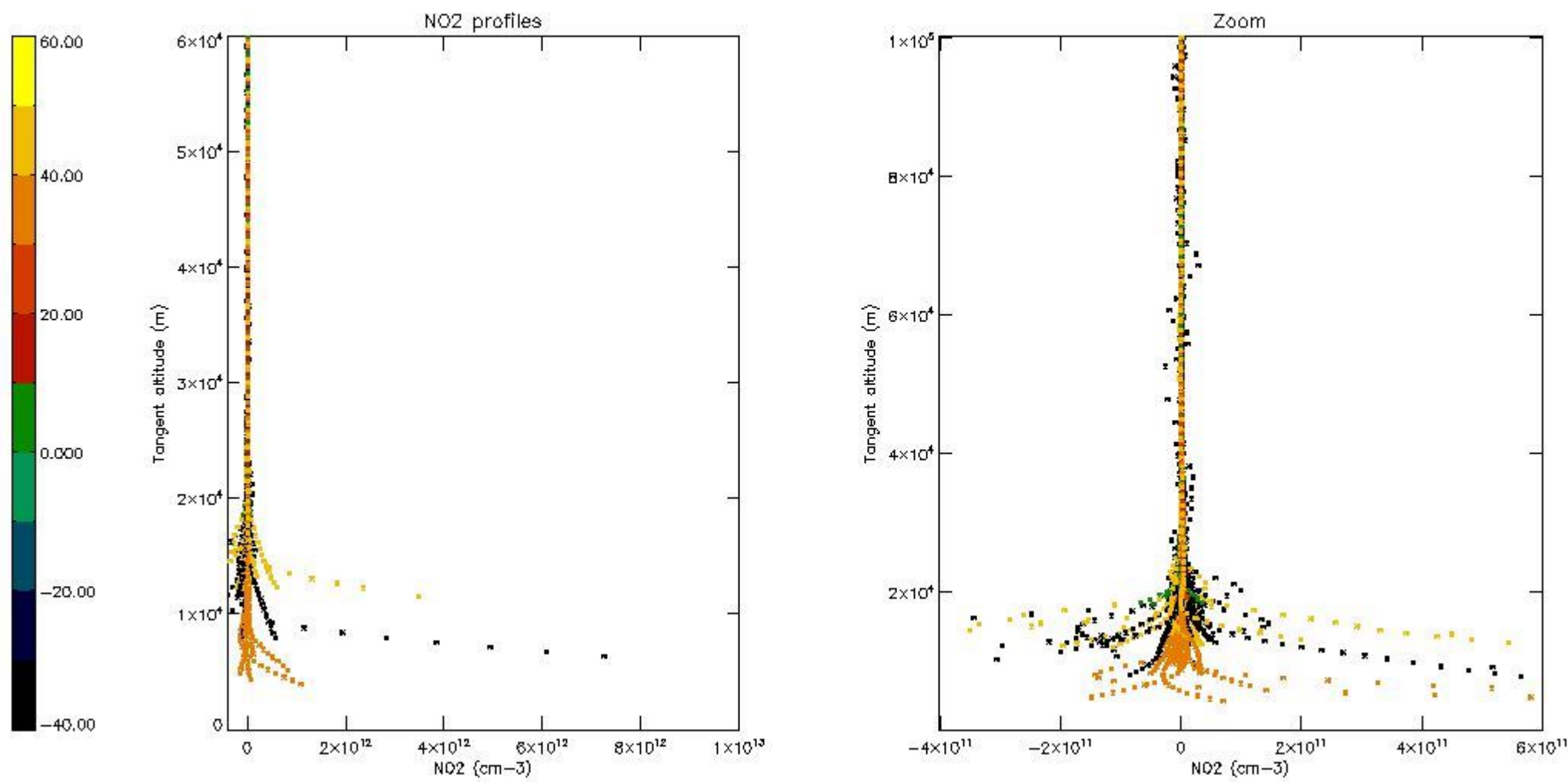
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



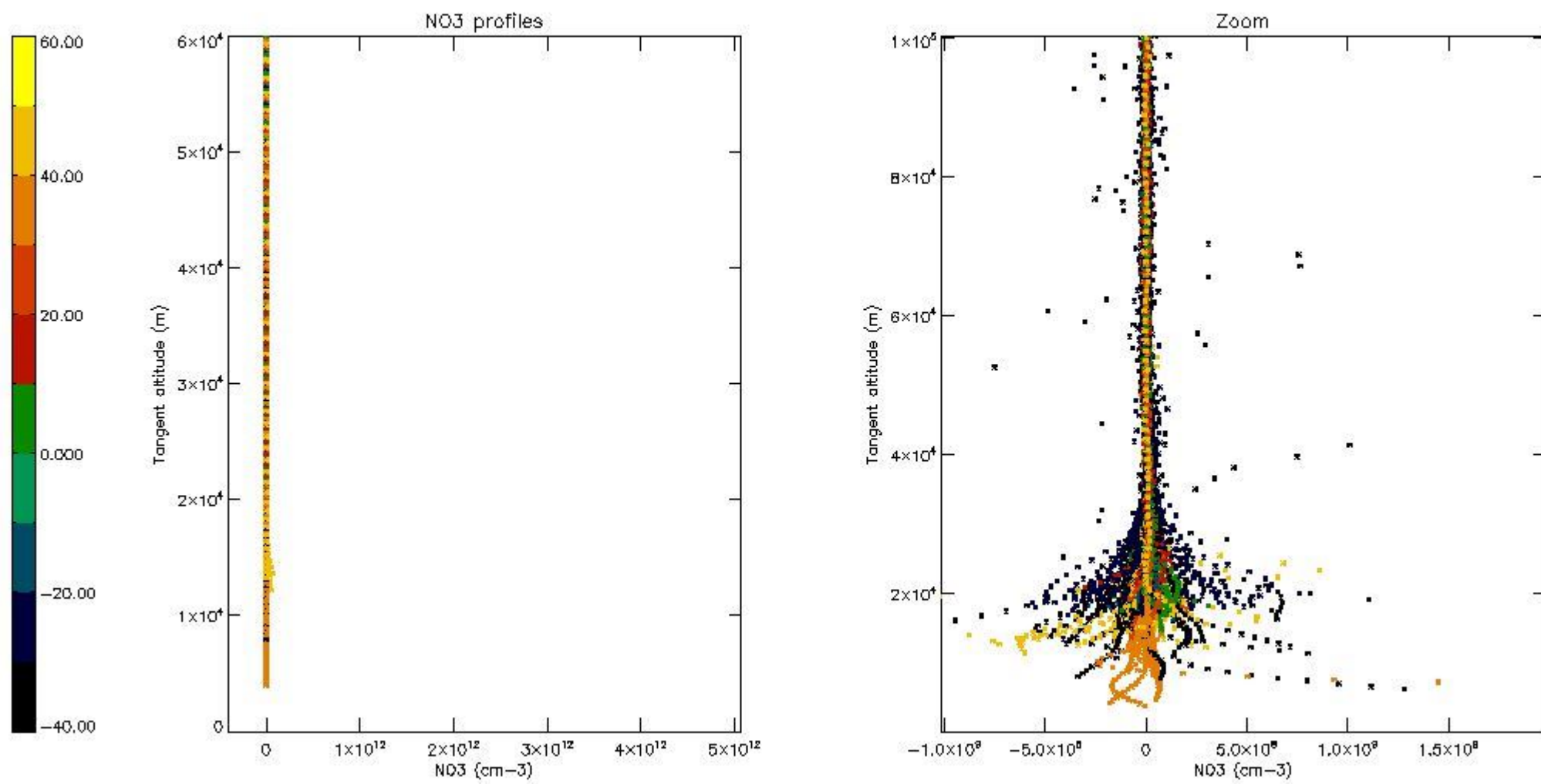
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



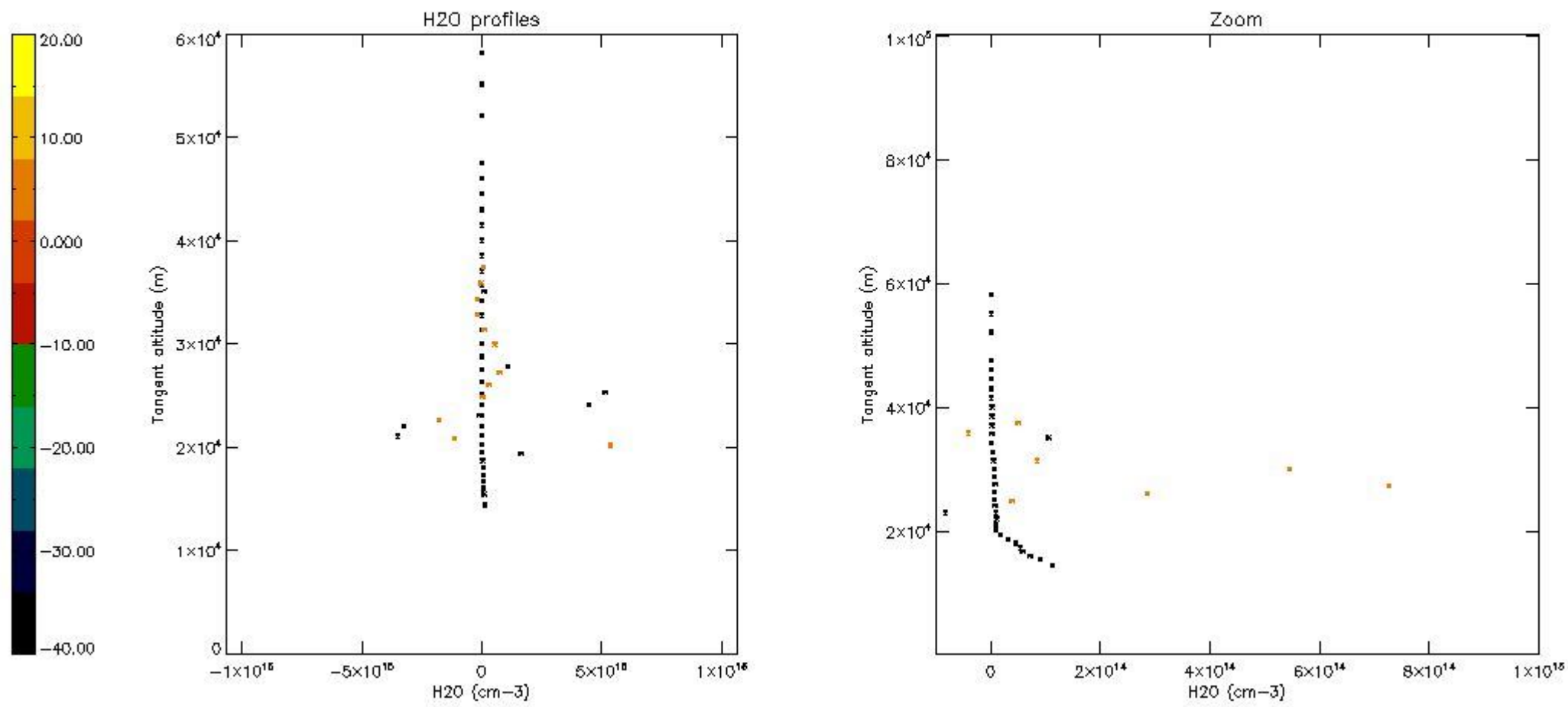
5.7 Plot NO3 profiles for all STD (dark without errors)

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	27-DEC-2008 00:11:16
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-DEC-2008 00:11:16
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-DEC-2008 00:11:16

GOMOS Level 2 Daily Report

SUMMARY

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

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[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](#)

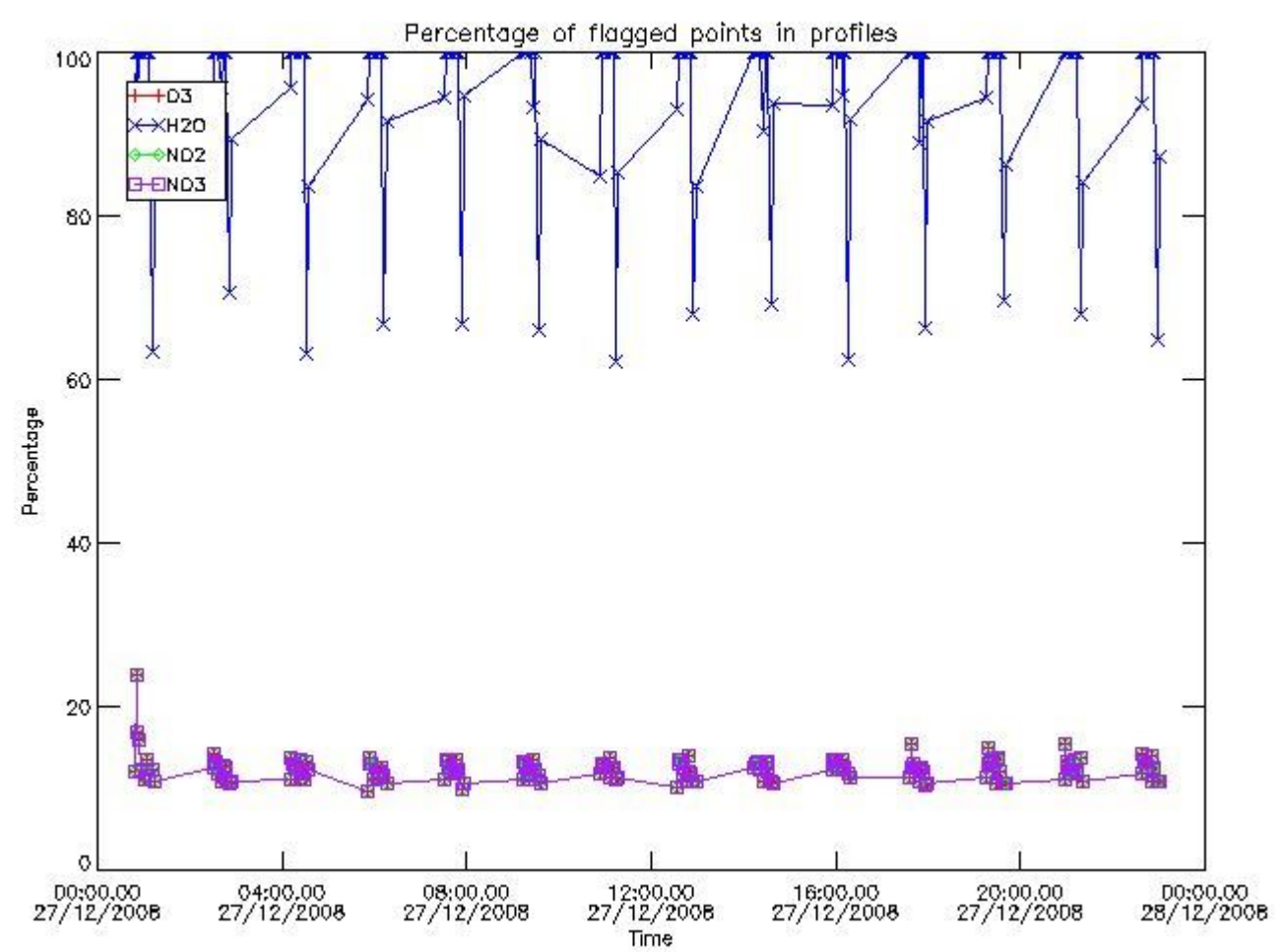
[6. Auxiliary Data Files used for the production reported in section 2](#)

397	GOM_NL__2PRFIN20081227_223729_000000482075_00072_35697_3551.N1	27-DEC-2008 22:37:29	Dark	47.500	54	5The Cen	2.0550	4500.0	95	35697	No
398	GOM_NL__2PRFIN20081227_223901_000000402075_00072_35697_3552.N1	27-DEC-2008 22:39:01	Dark	39.500	78	Alp Lup	2.3040	28000.	79	35697	No
399	GOM_NL__2PRFIN20081227_224020_000000392075_00072_35697_3553.N1	27-DEC-2008 22:40:20	Dark	38.500	95	Zet Cen	2.5450	26000.	77	35697	No
400	GOM_NL__2PRFIN20081227_224207_000000412075_00072_35697_3554.N1	27-DEC-2008 22:42:07	Dark	40.500	77	Eps Cen	2.3030	28000.	81	35697	No
401	GOM_NL__2PRFIN20081227_224339_000000412075_00073_35698_3543.N1	27-DEC-2008 22:43:39	Dark	41.000	64	Gam Cen	2.2000	10600.	82	35698	No
402	GOM_NL__2PRFIN20081227_224943_000000472075_00073_35698_3544.N1	27-DEC-2008 22:49:43	Dark	47.000	113	Mu Vel	2.6920	5000.0	94	35698	No
403	GOM_NL__2PRFIN20081227_225123_000000372075_00073_35698_3545.N1	27-DEC-2008 22:51:23	Dark	36.500	29	Bet Car	1.6720	10200.	73	35698	No
404	GOM_NL__2PRFIN20081227_225304_000000412075_00073_35698_3546.N1	27-DEC-2008 22:53:04	Dark	41.000	91	Kap Vel	2.4900	26000.	82	35698	No
405	GOM_NL__2PRFIN20081227_225430_000000422075_00073_35698_3547.N1	27-DEC-2008 22:54:30	Dark	41.500	46	Del Vel	1.9540	10600.	83	35698	No
406	GOM_NL__2PRFIN20081227_225839_000000482075_00073_35698_3548.N1	27-DEC-2008 22:58:39	Dark	47.500	2	Alp Car	-0.73600	7000.0	95	35698	No
407	GOM_NL__2PRFIN20081227_230147_000000482075_00073_35698_3549.N1	27-DEC-2008 23:01:47	Dark	47.500	117	Pi Pup	2.7060	3800.0	95	35698	No
408	GOM_NL__2PRFIN20081227_230441_000000472075_00073_35698_3550.N1	27-DEC-2008 23:04:41	Straylight	47.000	23	21Eps CMa	1.5020	26000.	94	35698	No
409	GOM_NL__2PRFIN20081227_230617_000000402075_00073_35698_3551.N1	27-DEC-2008 23:06:17	Straylight	40.000	179	24Omi2CMa	3.0320	24000.	80	35698	No
410	GOM_NL__2PRFIN20081227_230851_000000472075_00073_35698_3552.N1	27-DEC-2008 23:08:51	Straylight	47.000	1	9Alp CMa	-1.4400	11000.	94	35698	No
411	GOM_NL__2PRFIN20081227_231159_000000462075_00073_35698_3553.N1	27-DEC-2008 23:11:59	Straylight	45.500	7	19Bet Ori	0.10000	14000.	91	35698	No
412	GOM_NL__2PRFIN20081227_231355_000000422075_00073_35698_3554.N1	27-DEC-2008 23:13:55	Straylight	41.500	30	46Eps Ori	1.6940	30000.	83	35698	No
413	GOM_NL__2PRFIN20081227_231633_000000572075_00073_35698_3555.N1	27-DEC-2008 23:16:33	Twilight_stray	57.000	14	58Alp Ori	0.87000	3000.0	114	35698	No
414	GOM_NL__2PRFIN20081227_231910_000000522075_00073_35698_3556.N1	27-DEC-2008 23:19:10	Bright	52.000	13	87Alp Tau	0.86700	3800.0	104	35698	No
415	GOM_NL__2PRFIN20081227_232033_000000412075_00073_35698_3557.N1	27-DEC-2008 23:20:33	Bright	41.000	176	23Zet Tau	3.0200	22000.	82	35698	No
416	GOM_NL__2PRFIN20081227_232239_000000402075_00073_35698_3558.N1	27-DEC-2008 23:22:39	Bright	40.000	28	12Bet Tau	1.6500	15200.	80	35698	No
417	GOM_NL__2PRFIN20081227_232539_000000392075_00073_35698_3559.N1	27-DEC-2008 23:25:39	Bright	39.000	107	37The Aur	2.6490	11000.	78	35698	No
418	GOM_NL__2PRFIN20081227_232735_000000422075_00073_35698_3560.N1	27-DEC-2008 23:27:35	Bright	42.000	6	13Alp Aur	0.080000	3400.0	84	35698	No
419	GOM_NL__2PRFIN20081227_233939_000000362075_00073_35698_3561.N1	27-DEC-2008 23:39:39	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	35698	No
420	GOM_NL__2PRFIN20081227_234412_000000382075_00073_35698_3562.N1	27-DEC-2008 23:44:12	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	35698	No
421	GOM_NL__2PRFIN20081227_234755_000000372075_00073_35698_3563.N1	27-DEC-2008 23:47:55	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	35698	No
422	GOM_NL__2PRFIN20081227_235506_000000392075_00073_35698_3564.N1	27-DEC-2008 23:55:06	Bright	39.000	180	27Gam Boo	3.0400	8000.0	78	35698	No
423	GOM_NL__2PRFIN20081227_235839_000000592075_00073_35698_3565.N1	27-DEC-2008 23:58:39	Bright	59.000	83		2.3780	11000.	118	35698	No

3. Quality information per product

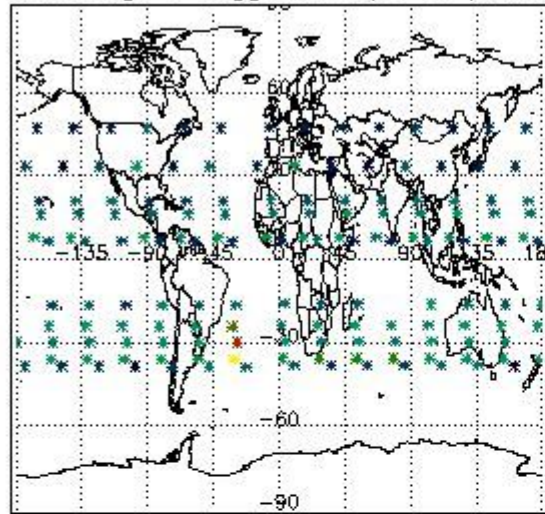
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

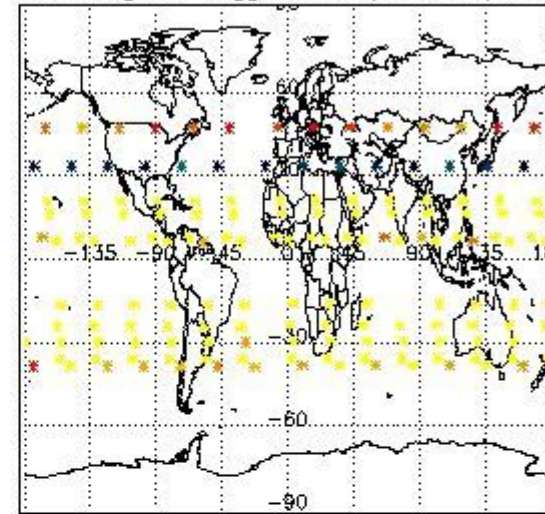


3.2 Plot quality information per product (world map)

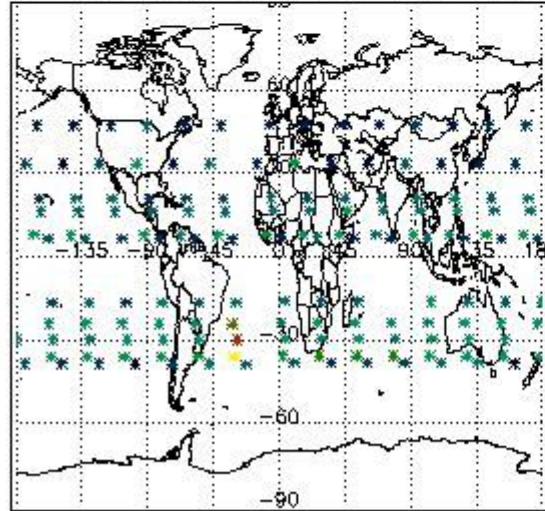
Percentage of flagged data per O3 profile



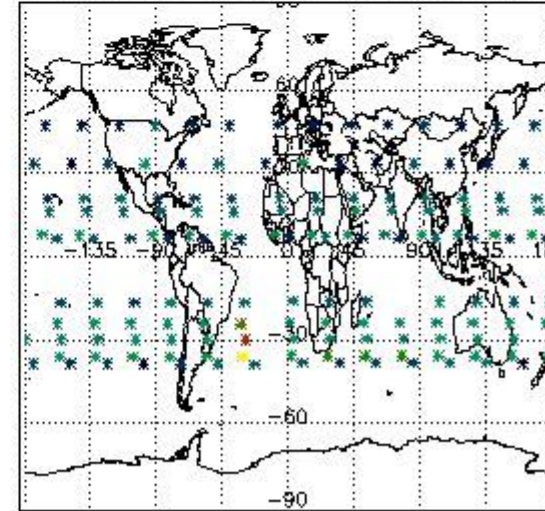
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

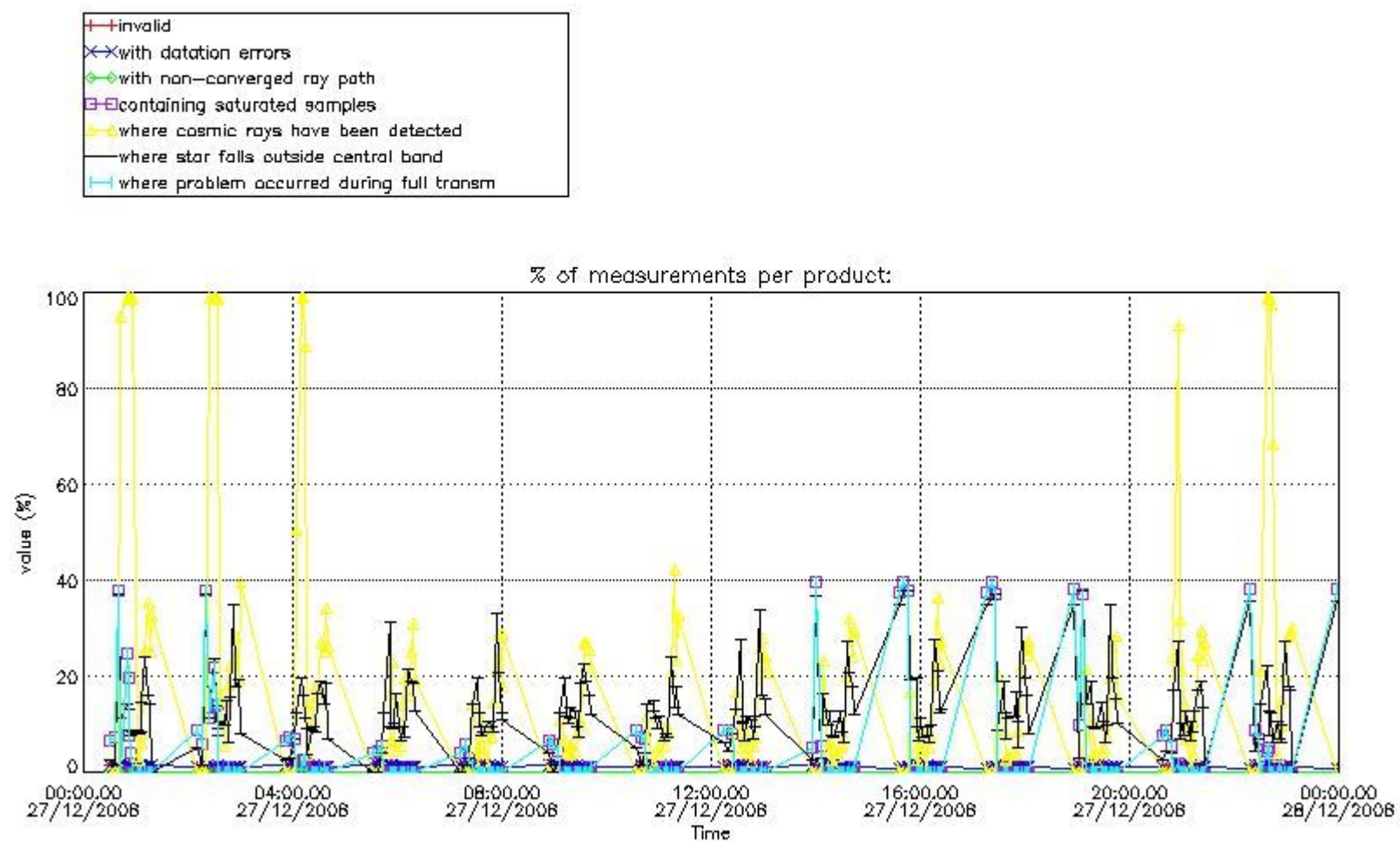


4. Level 1 quality information per product

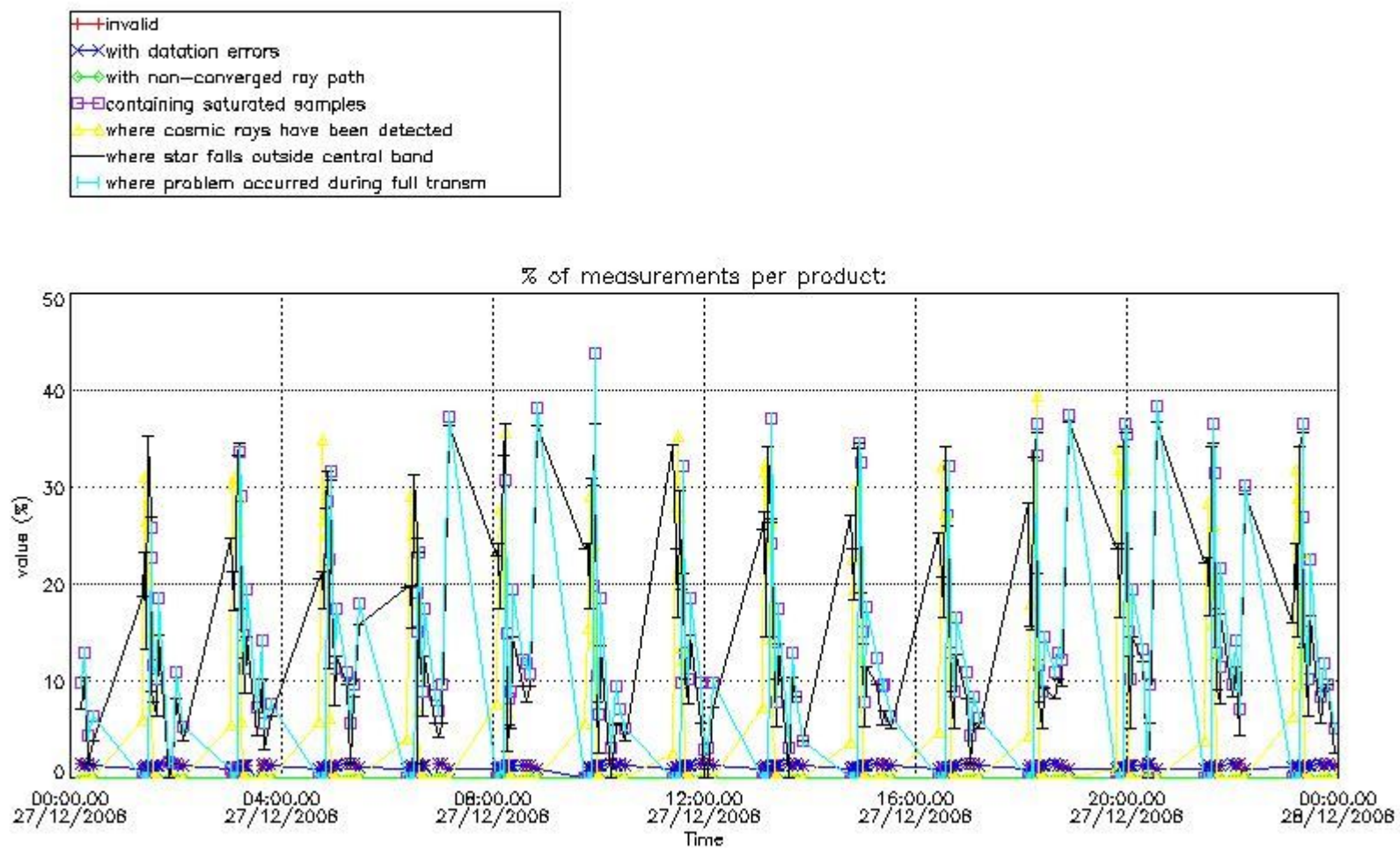
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



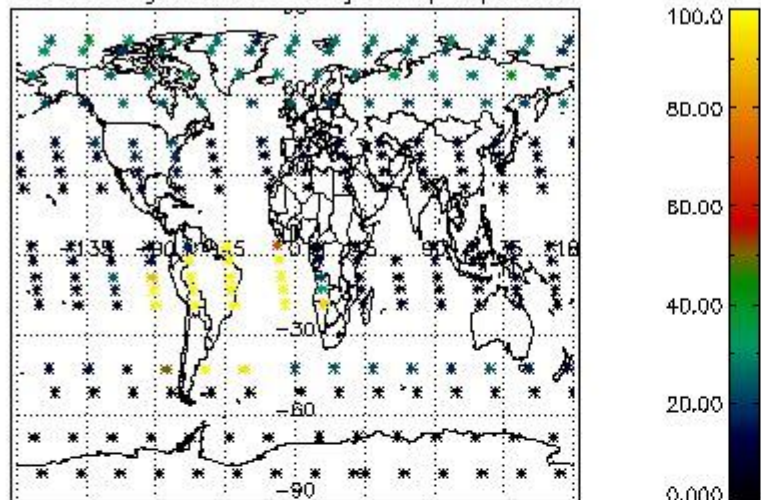
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



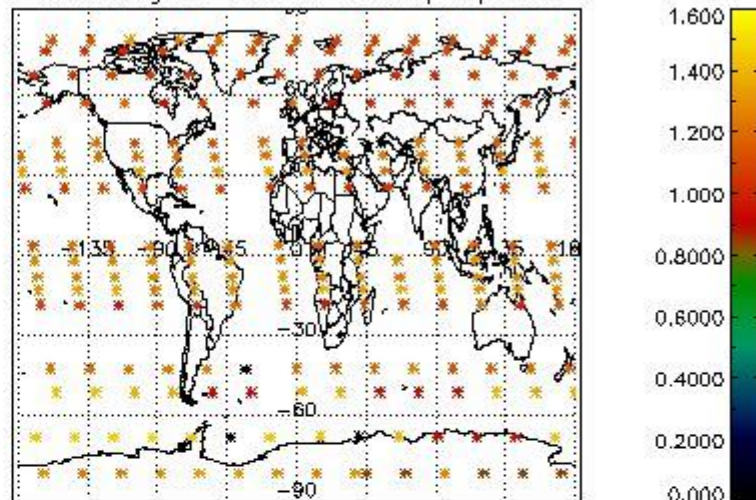
4.2 Plot quality information per product coming from level 1b processing (world map)

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

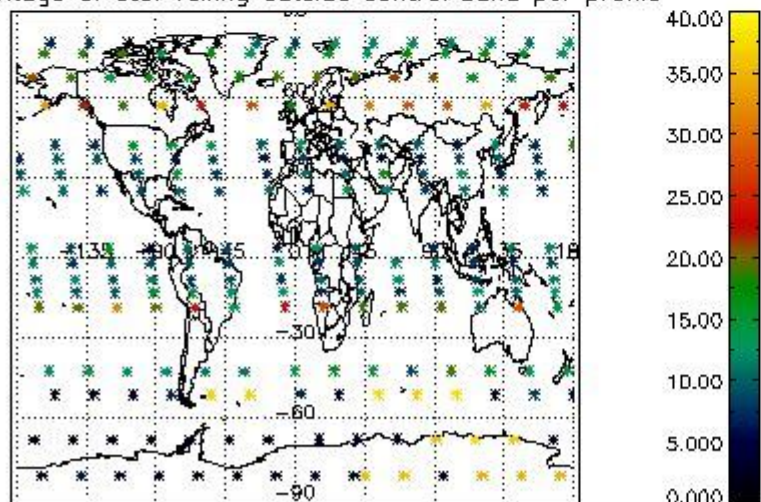
Percentage of cosmic ray hits per profile



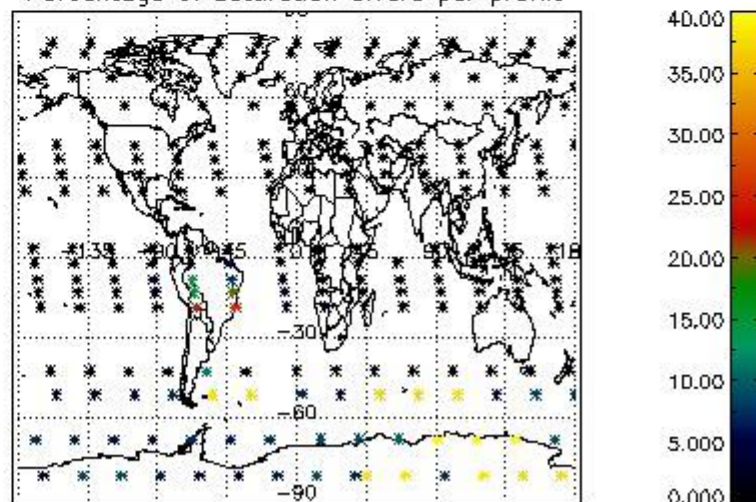
Percentage of datation errors per profile



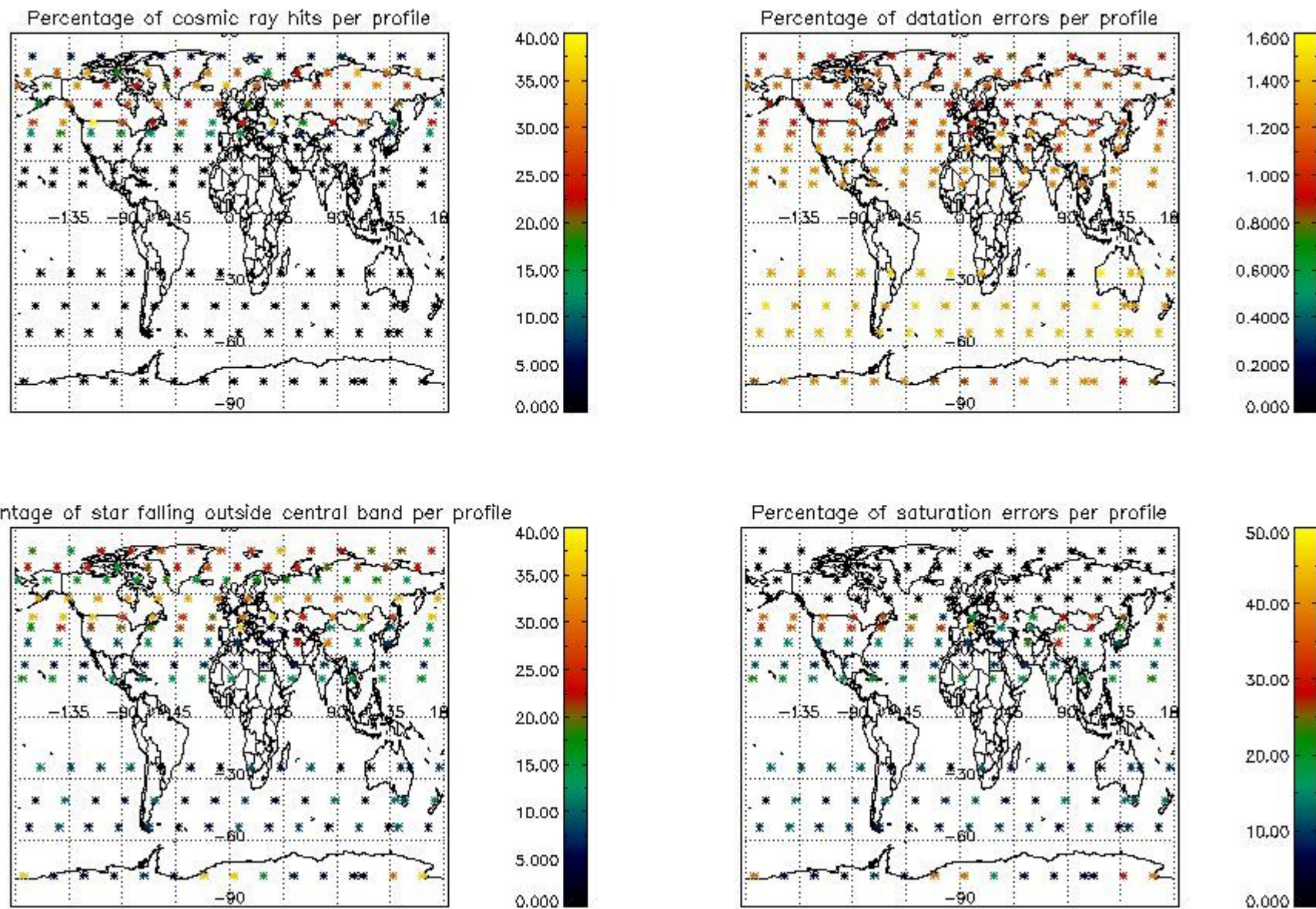
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

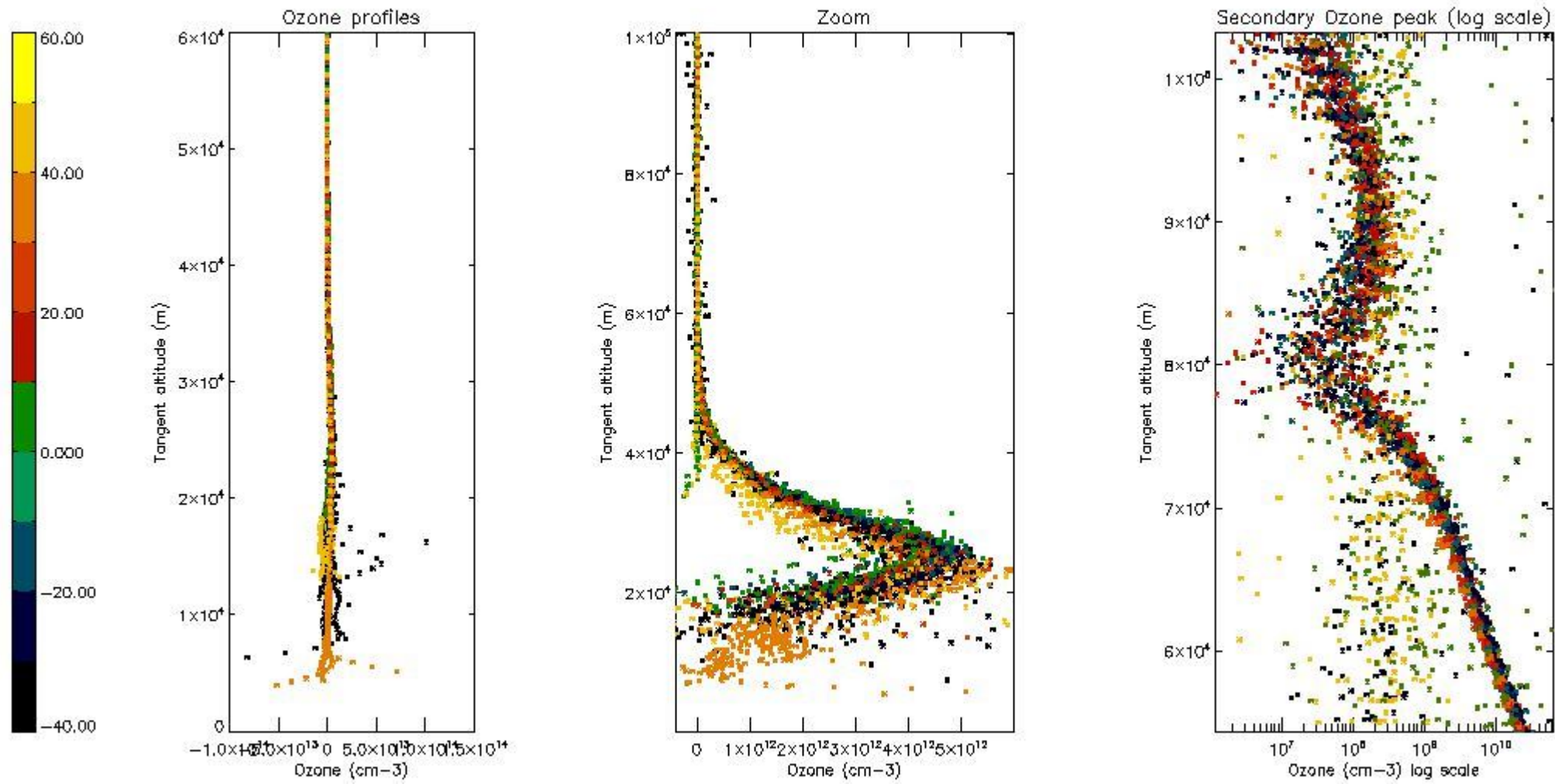
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	18

STD < 10	14
STD < 5	9

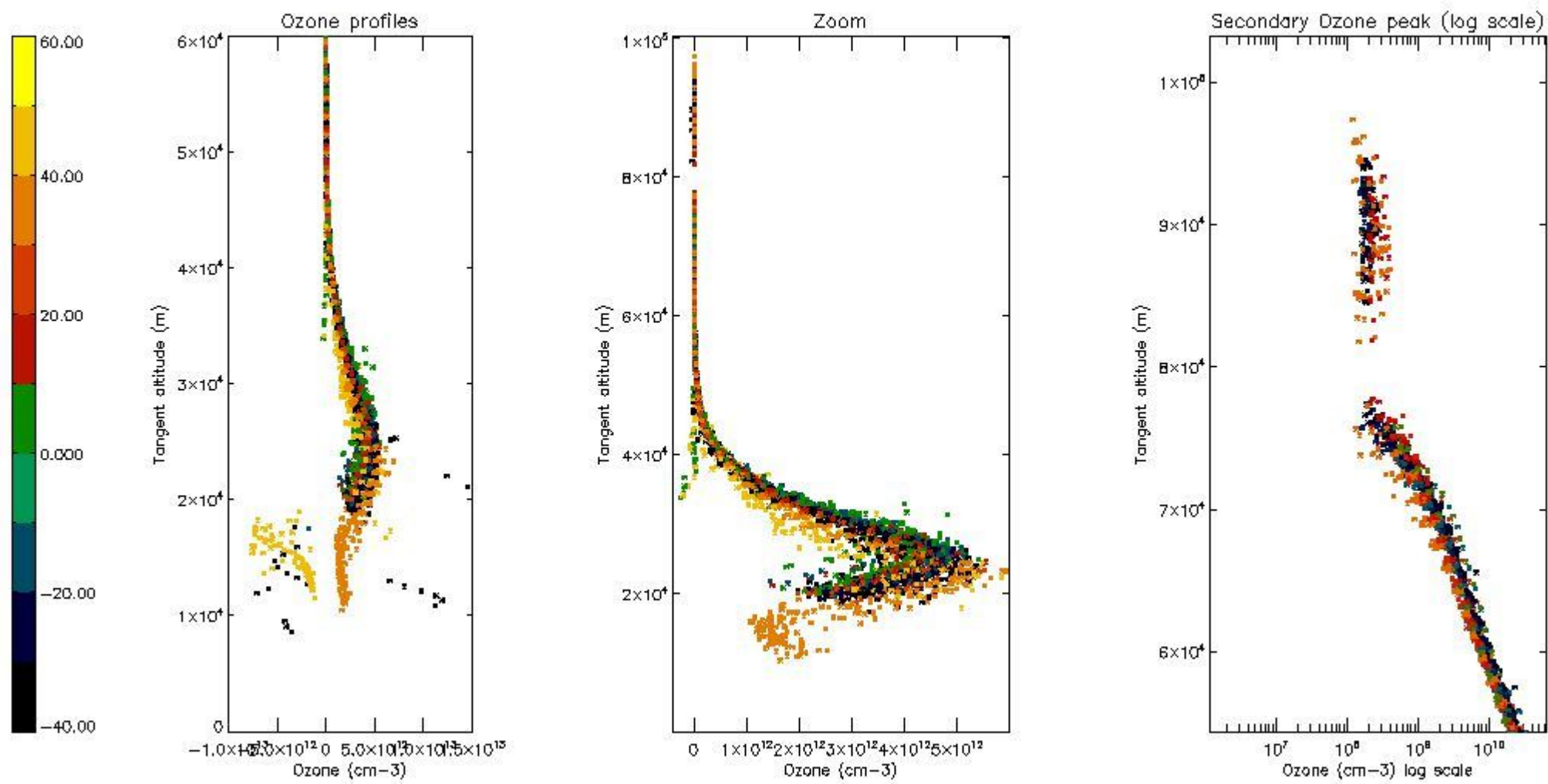
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



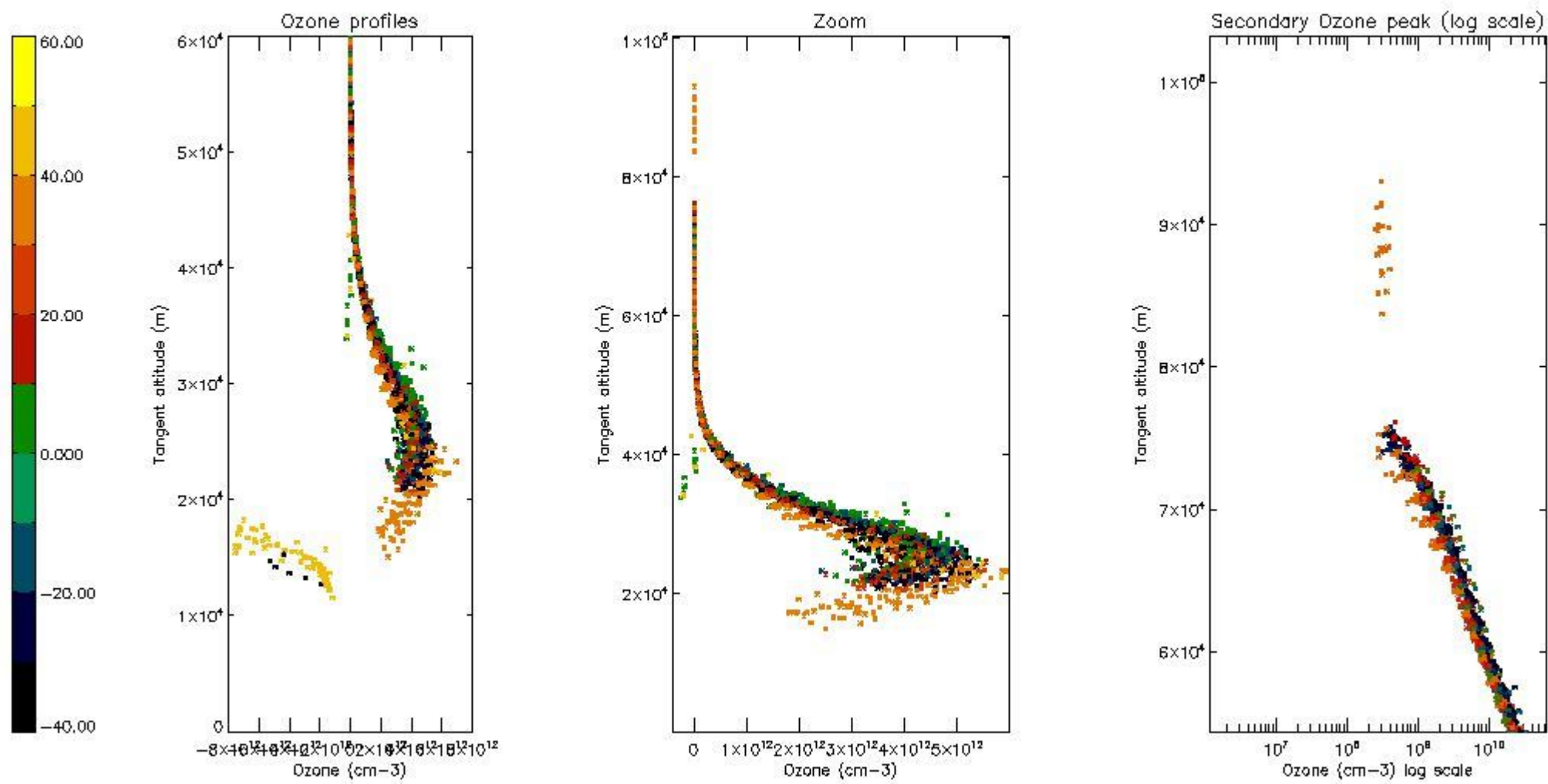
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



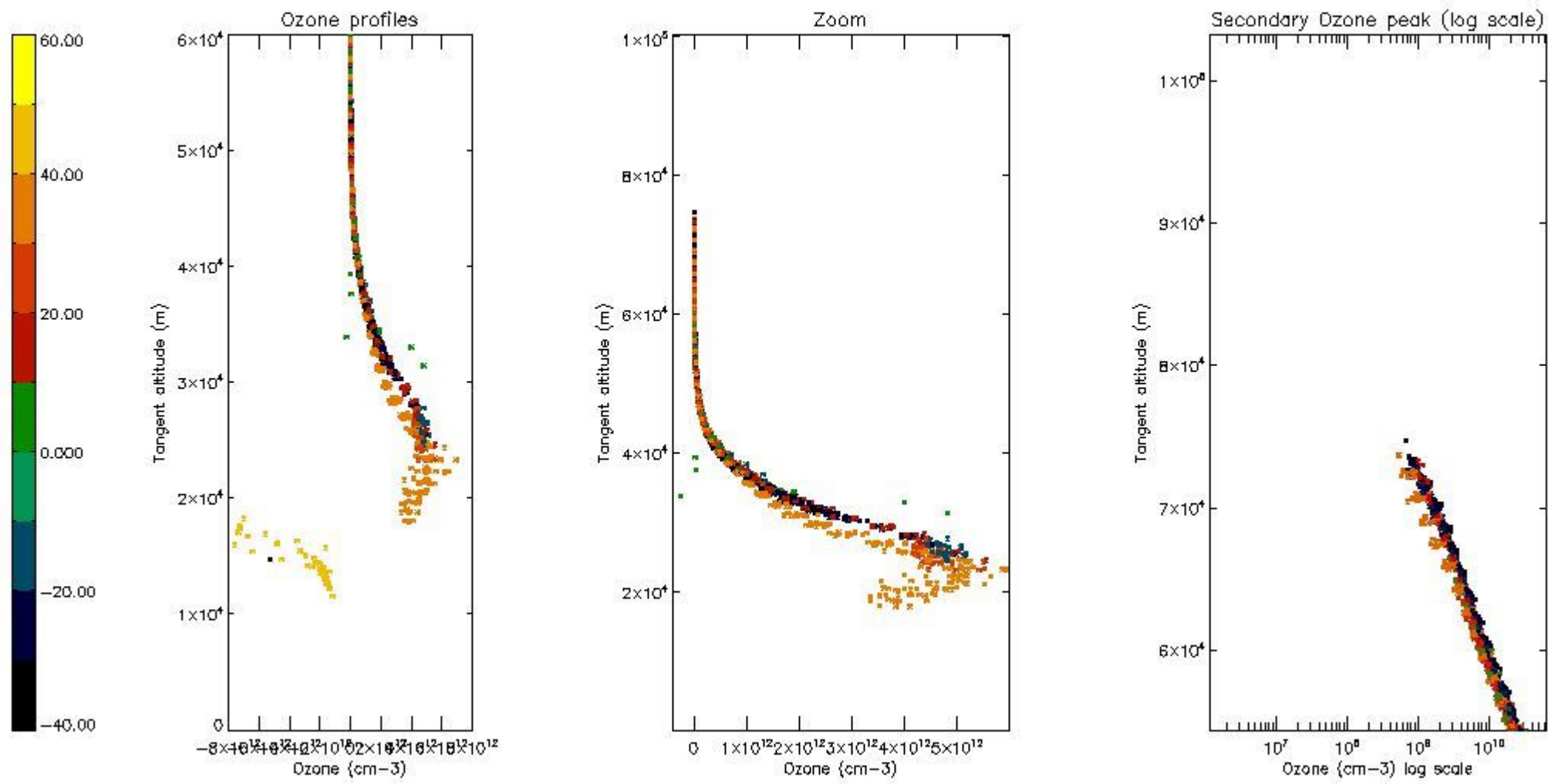
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



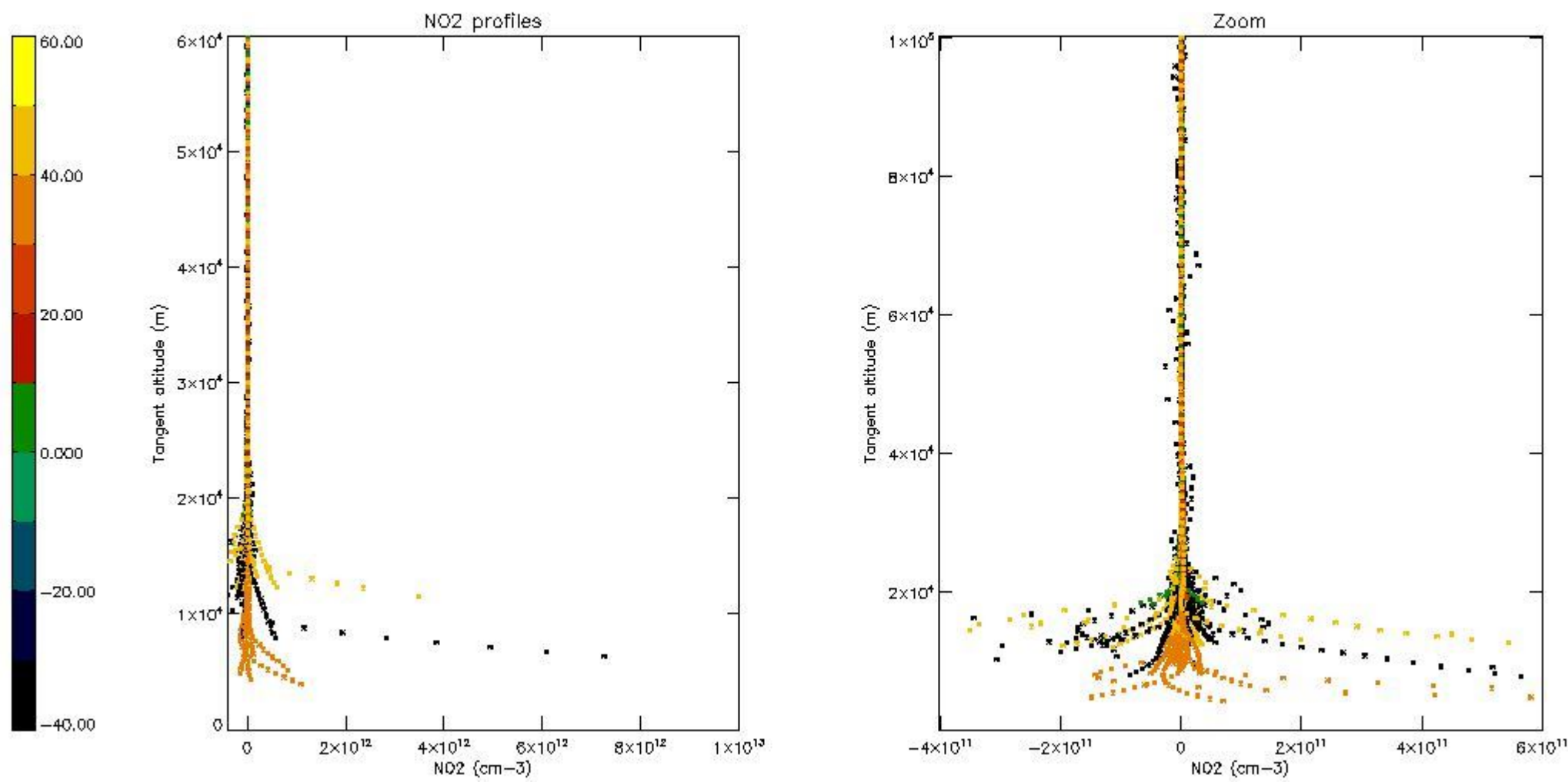
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



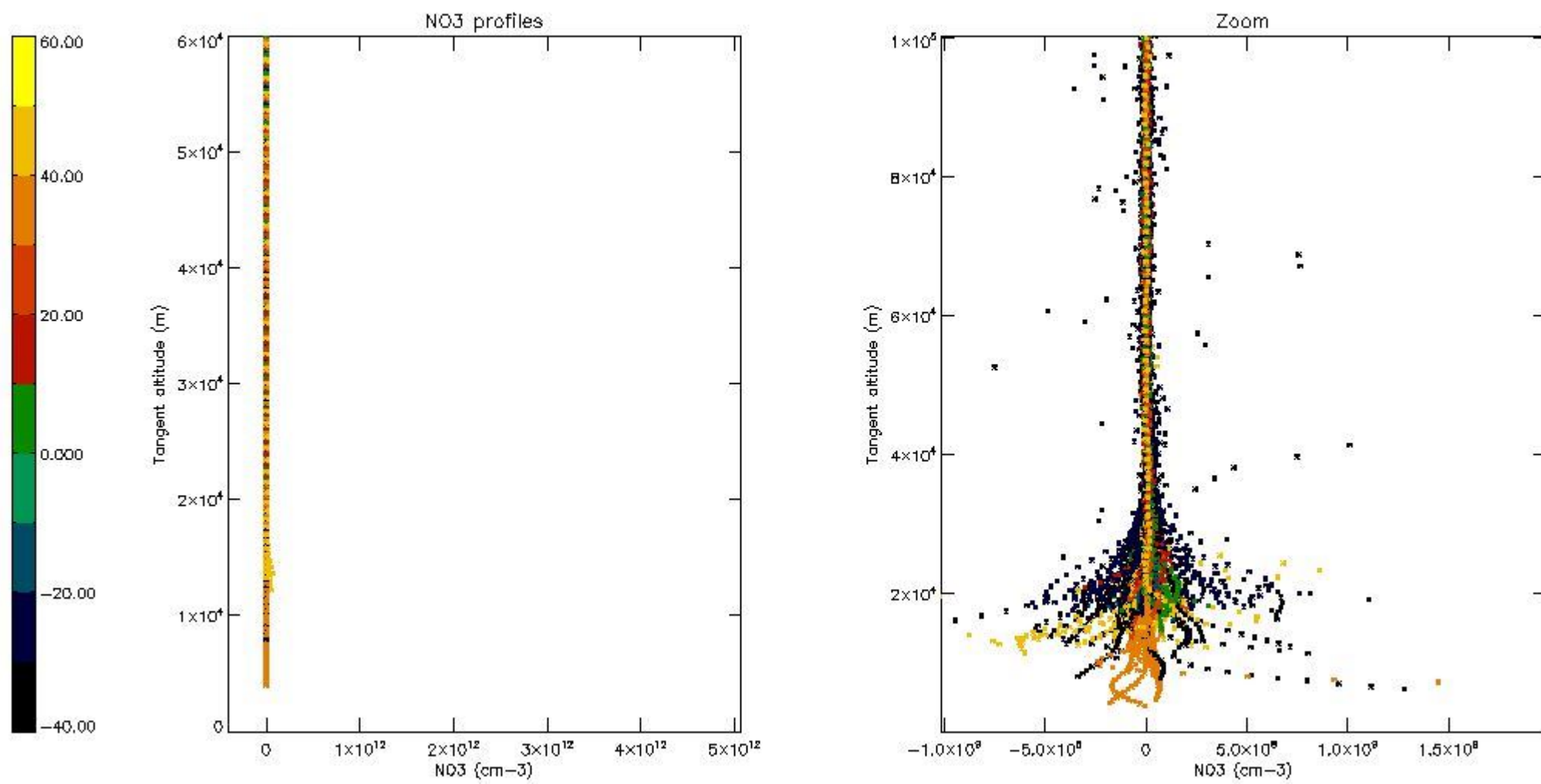
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



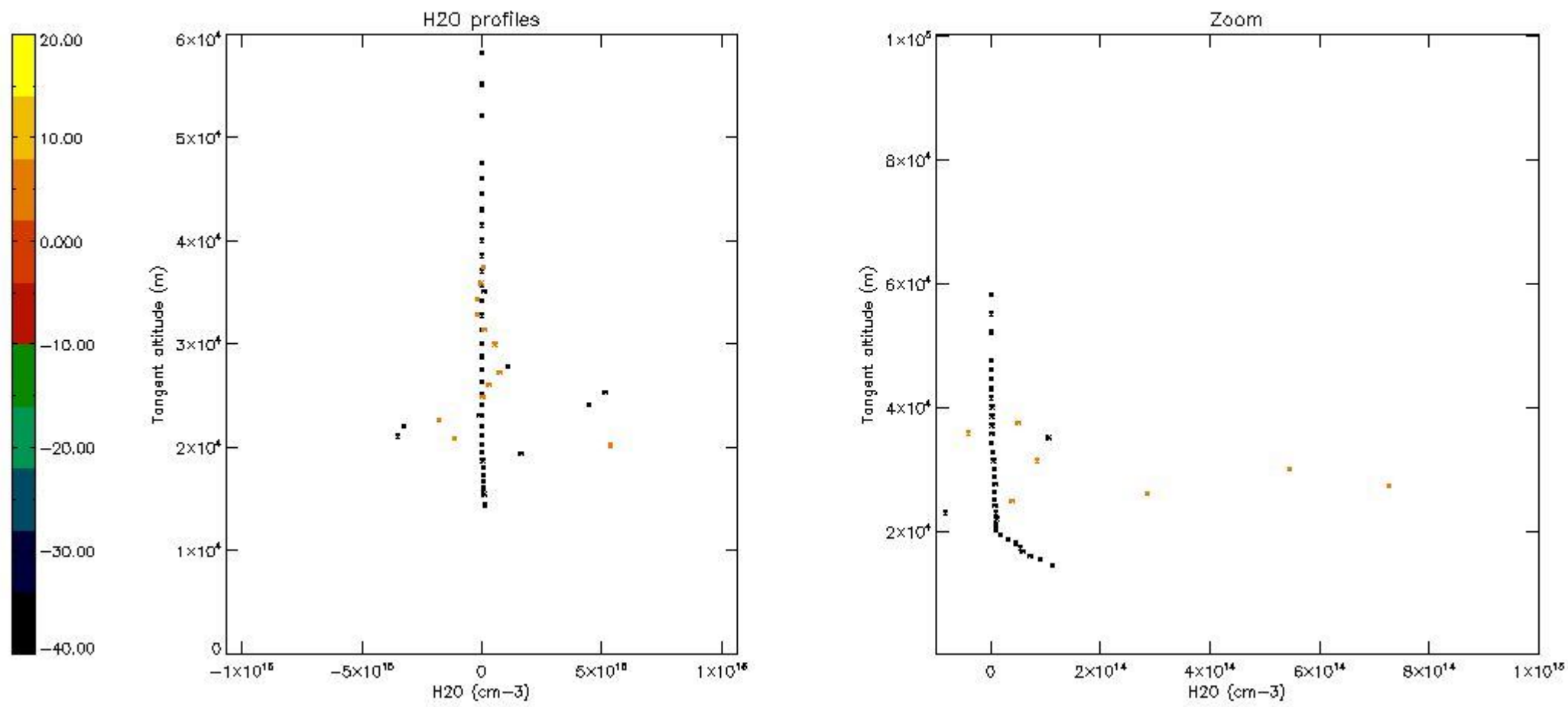
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

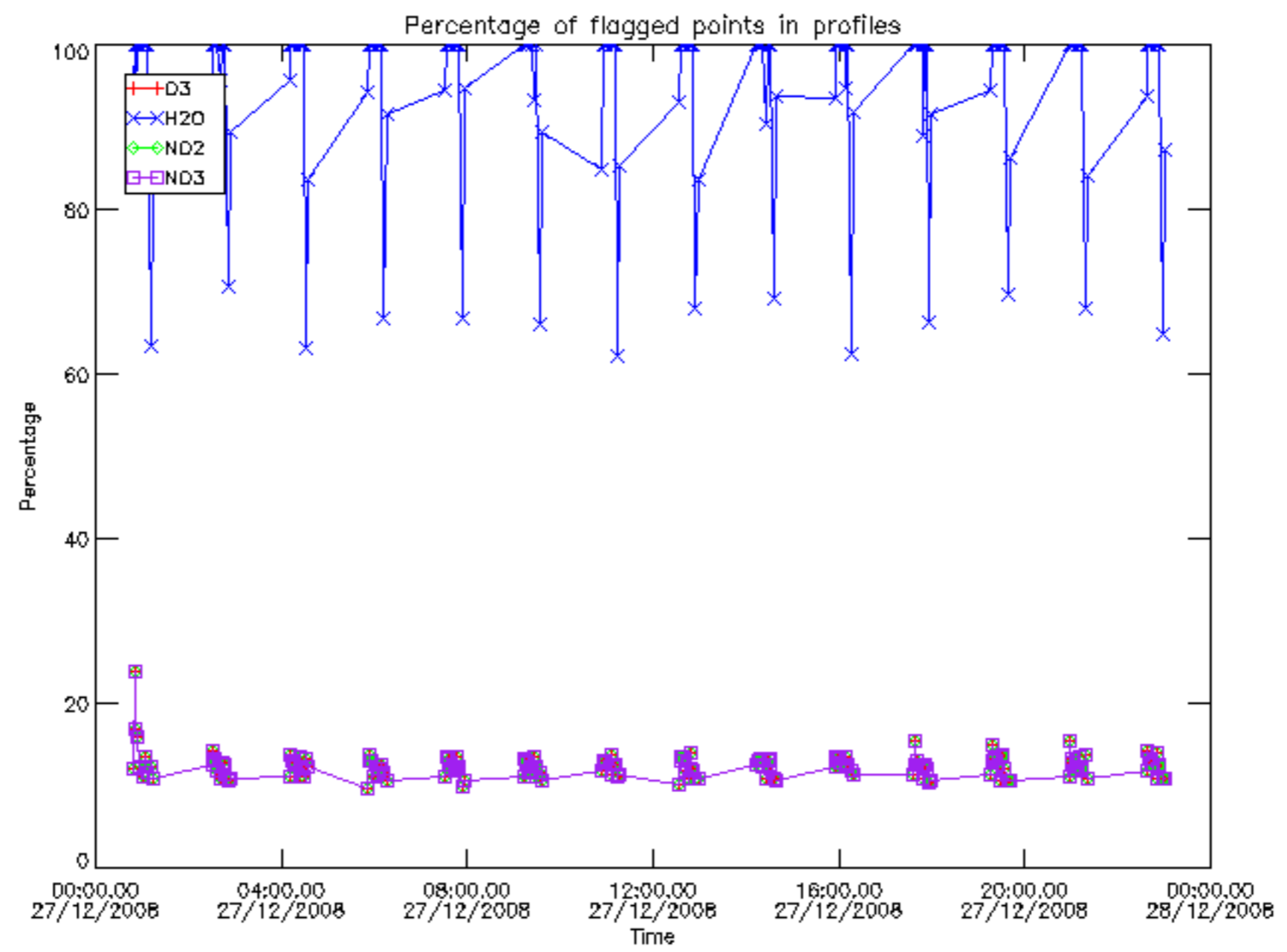
The colorbar represents the latitude.



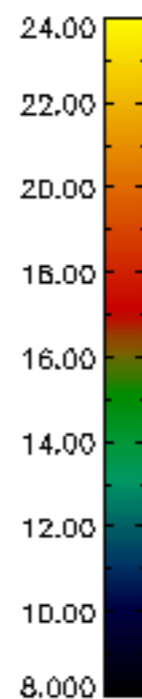
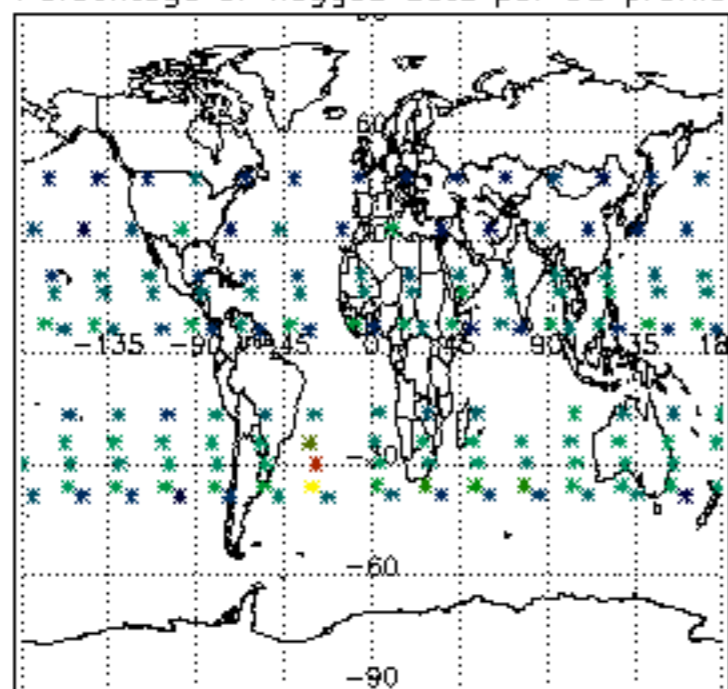
6. Auxiliary Data Files used for the production reported in section 2

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.

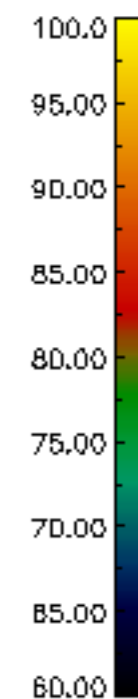
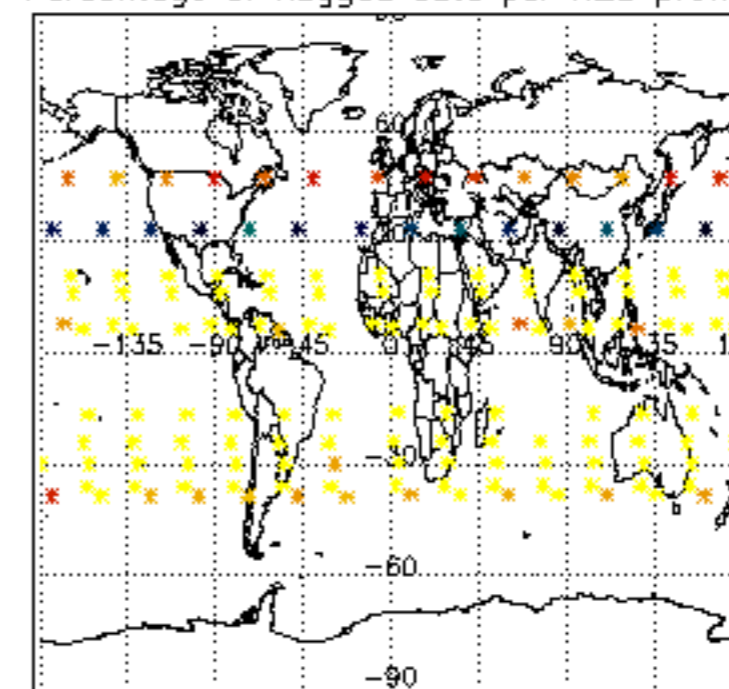
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	27-DEC-2008 00:11:16
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-DEC-2008 00:11:16
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-DEC-2008 00:11:16



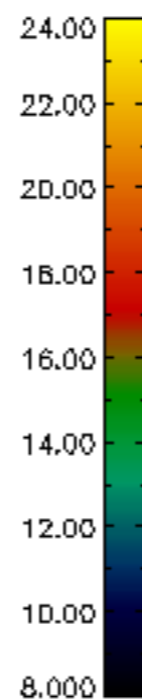
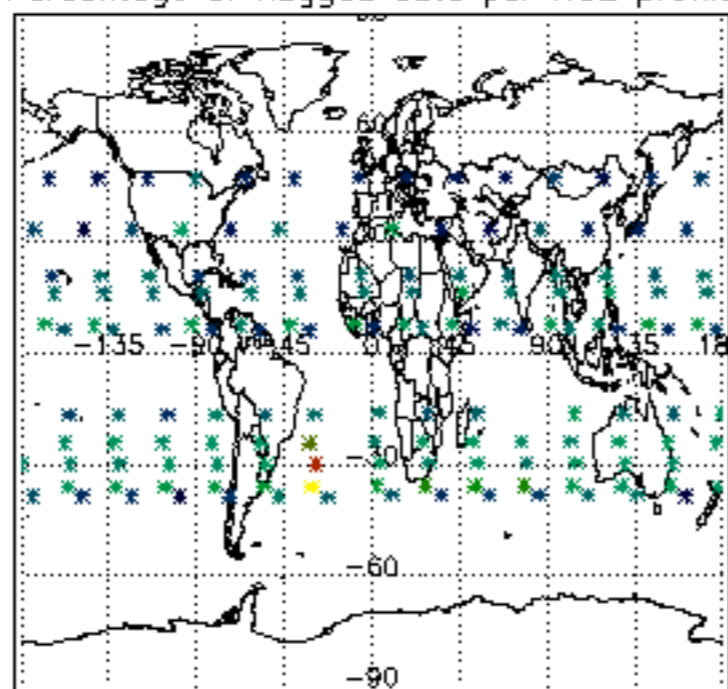
Percentage of flagged data per D3 profile



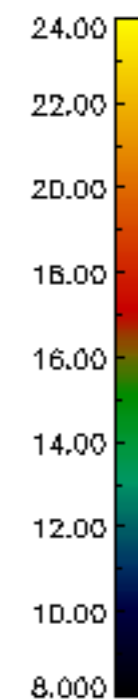
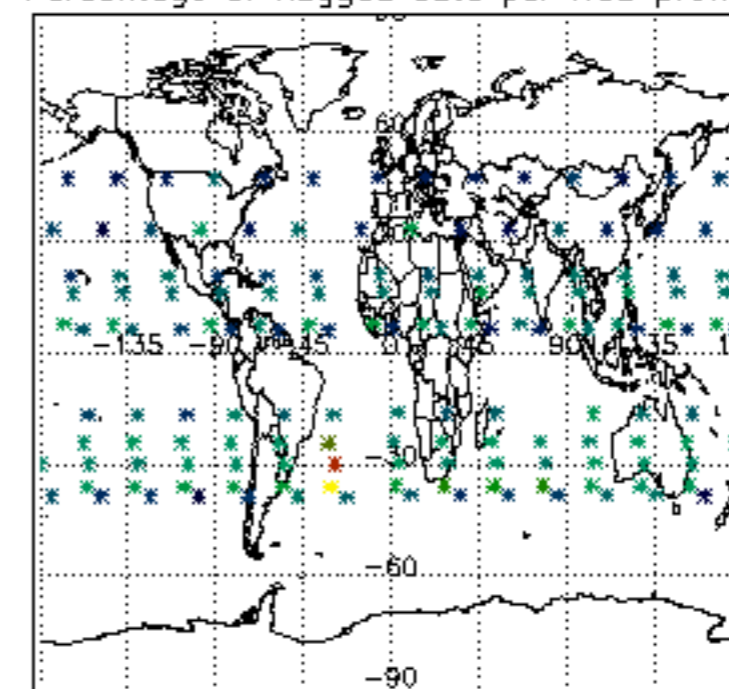
Percentage of flagged data per H2O profile

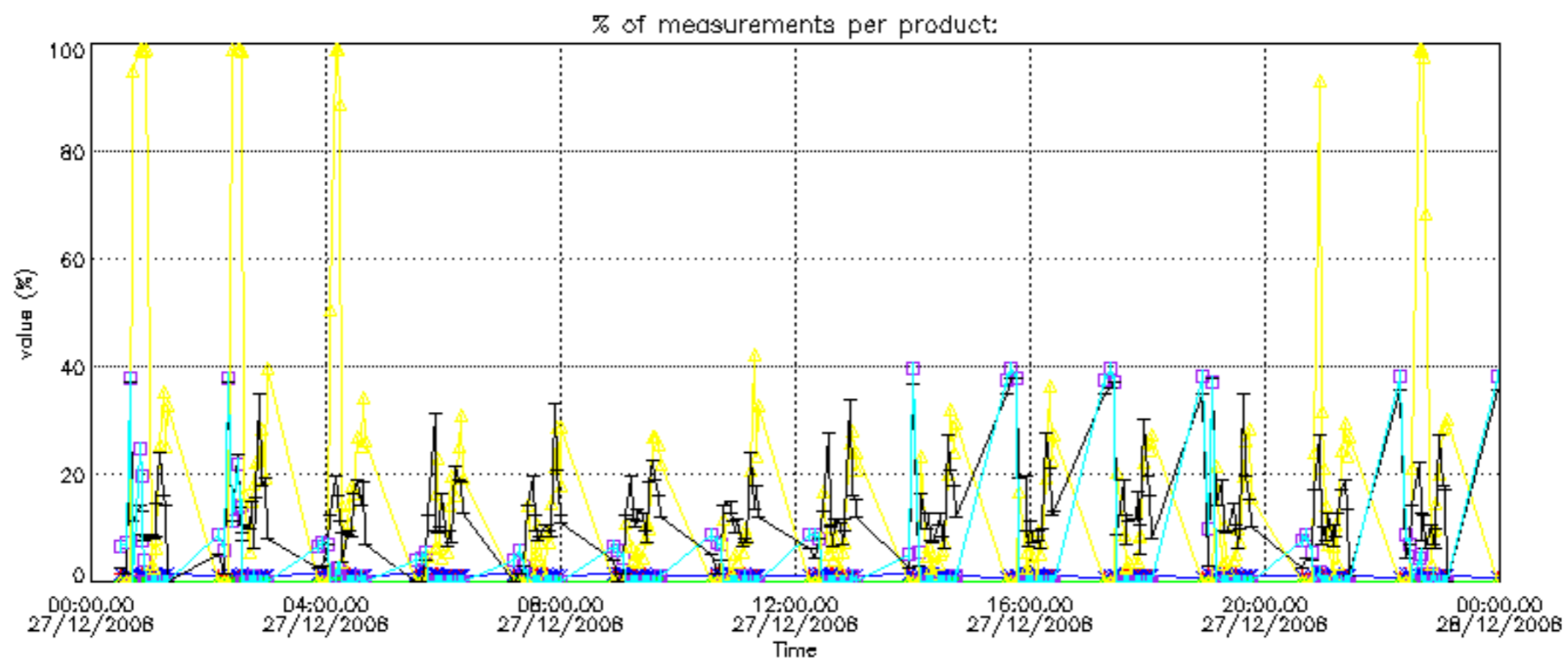


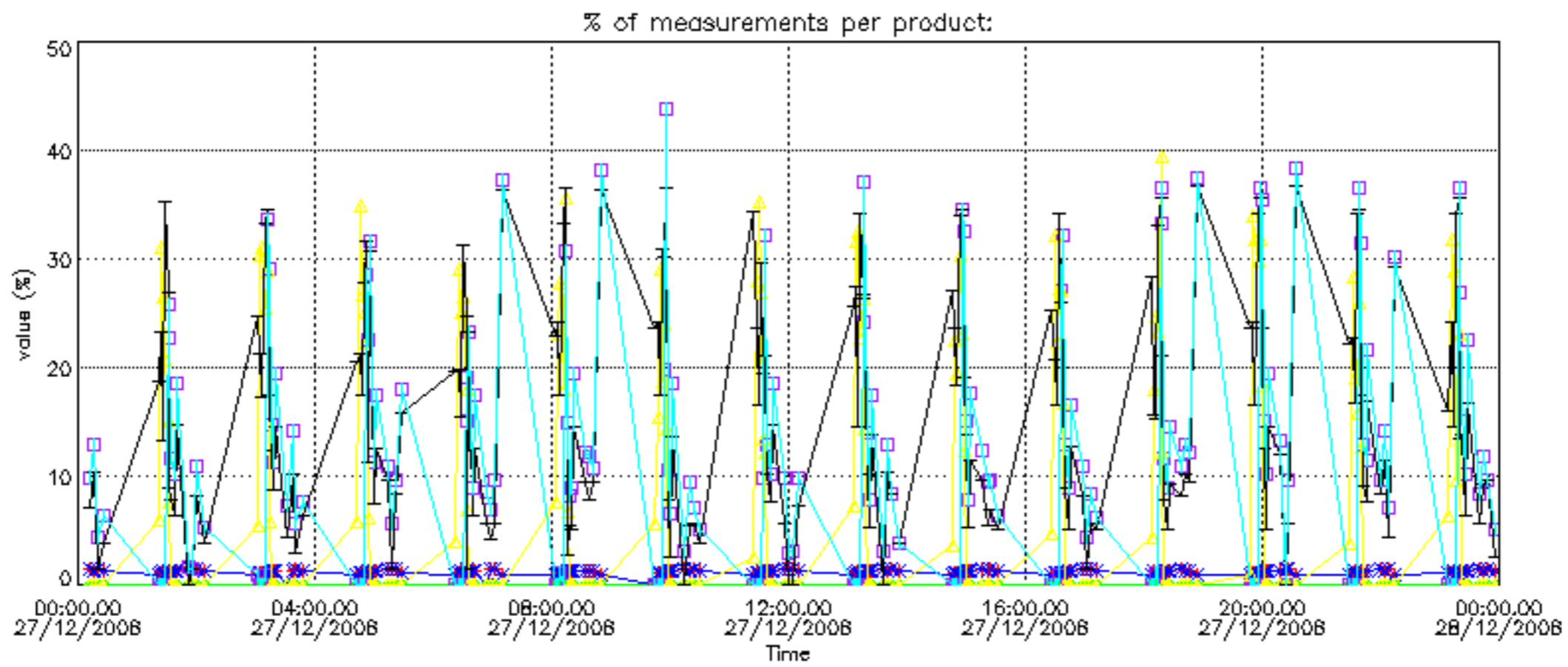
Percentage of flagged data per NO2 profile



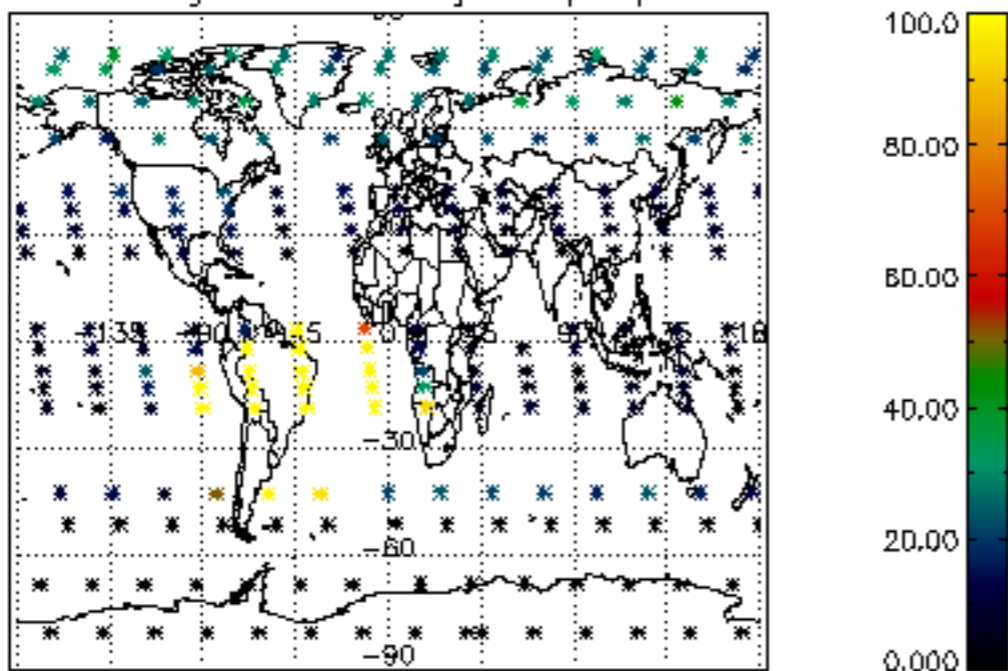
Percentage of flagged data per NO3 profile



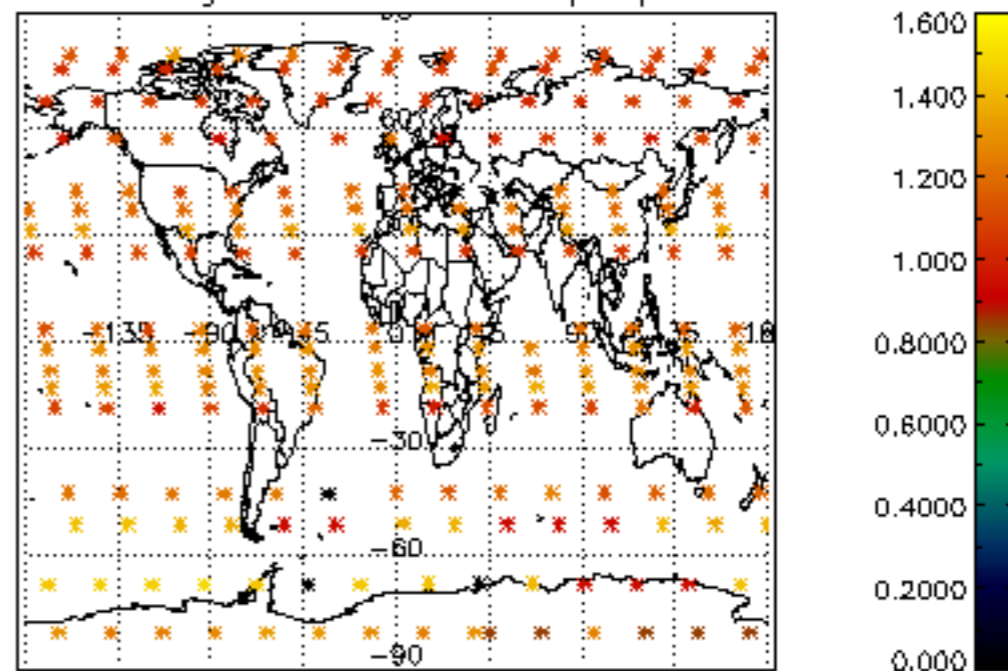




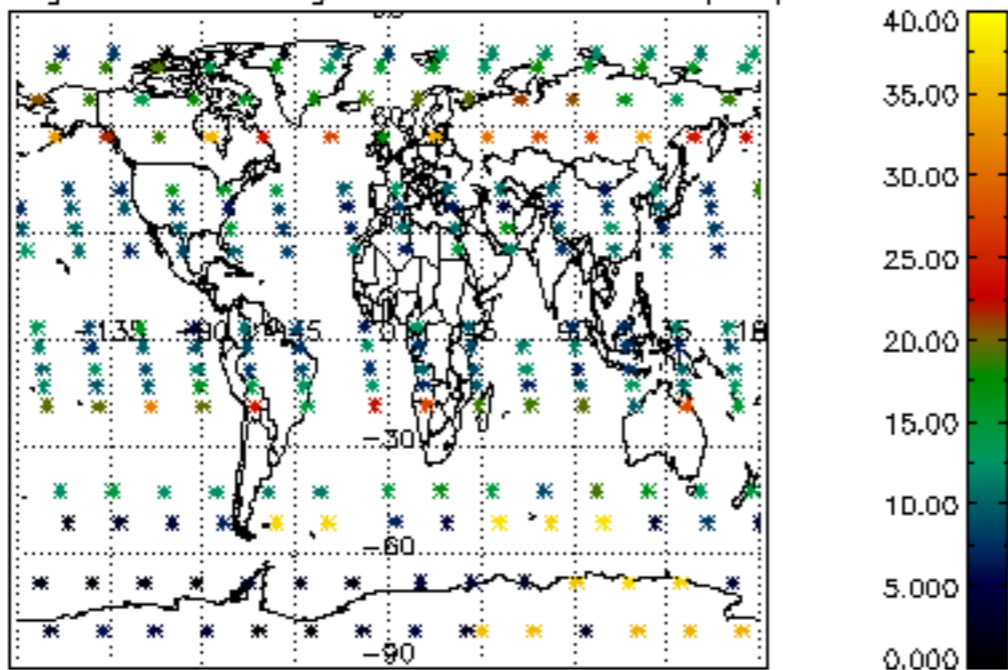
Percentage of cosmic ray hits per profile



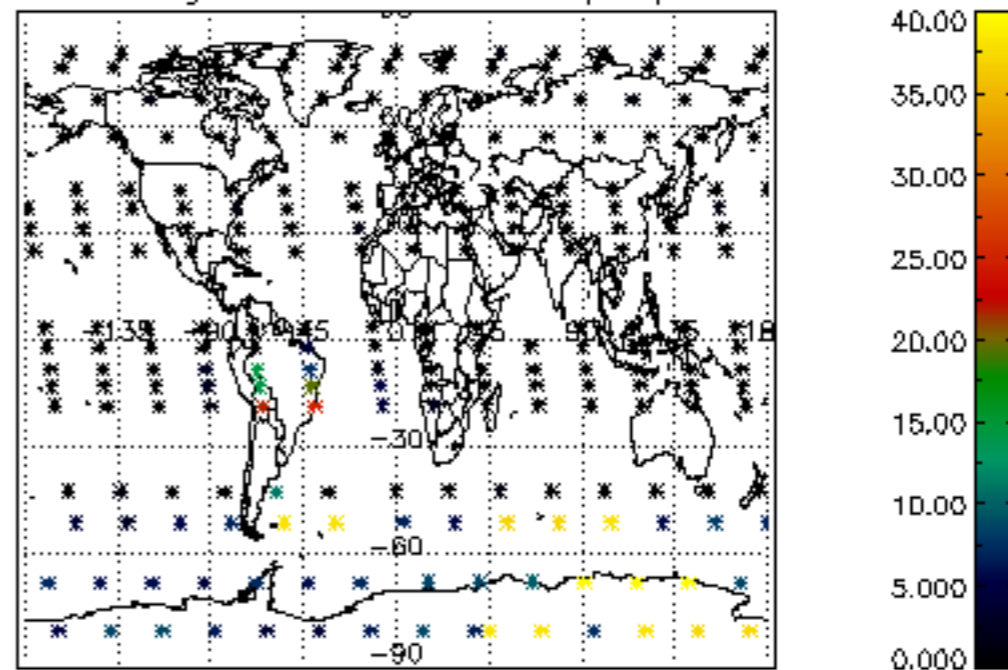
Percentage of datation errors per profile



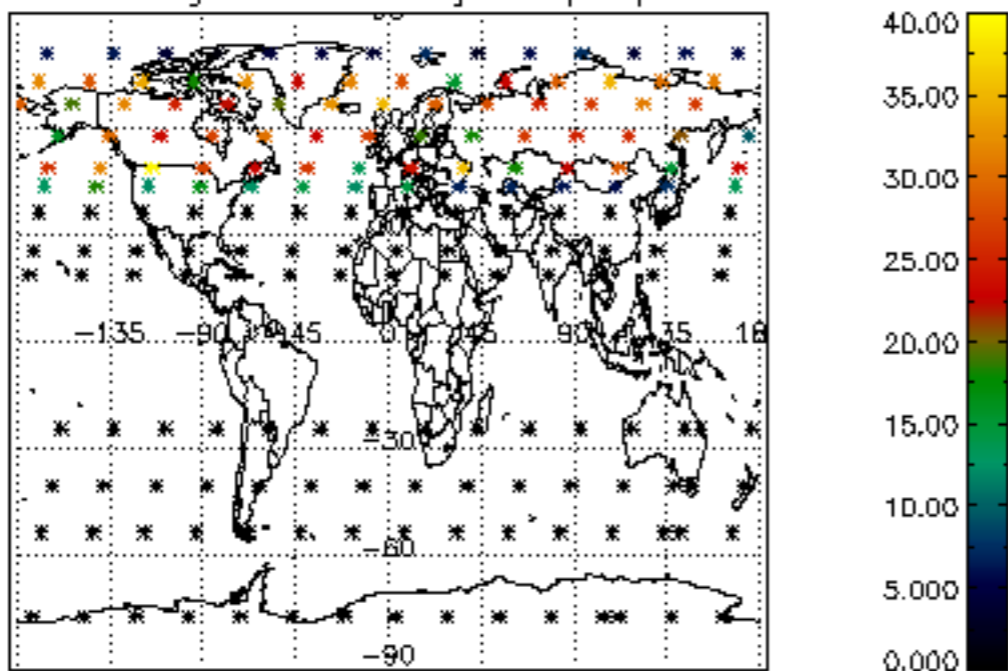
Percentage of star falling outside central band per profile



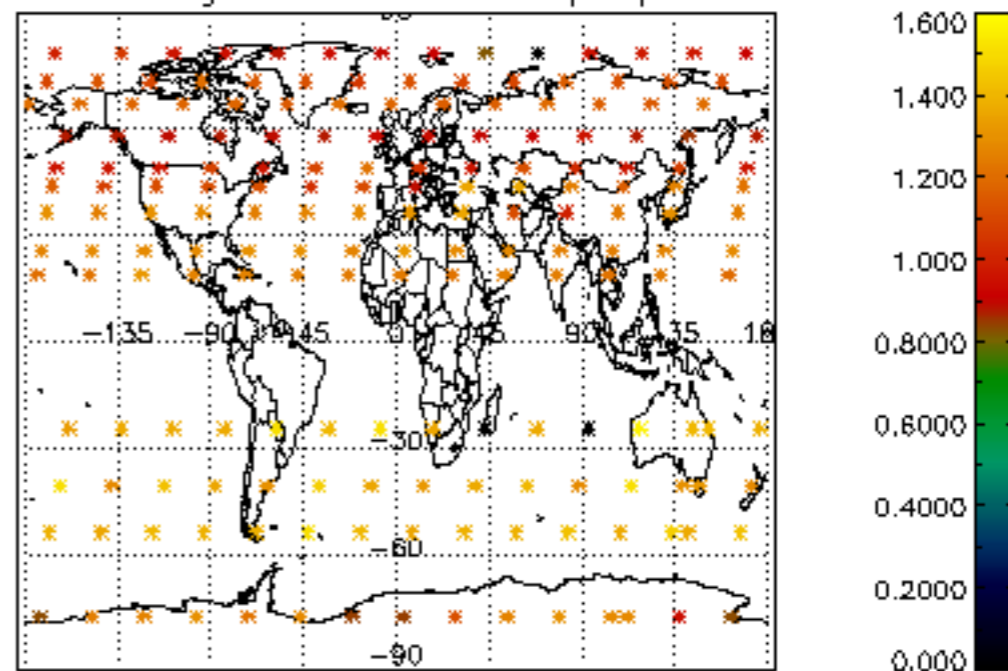
Percentage of saturation errors per profile



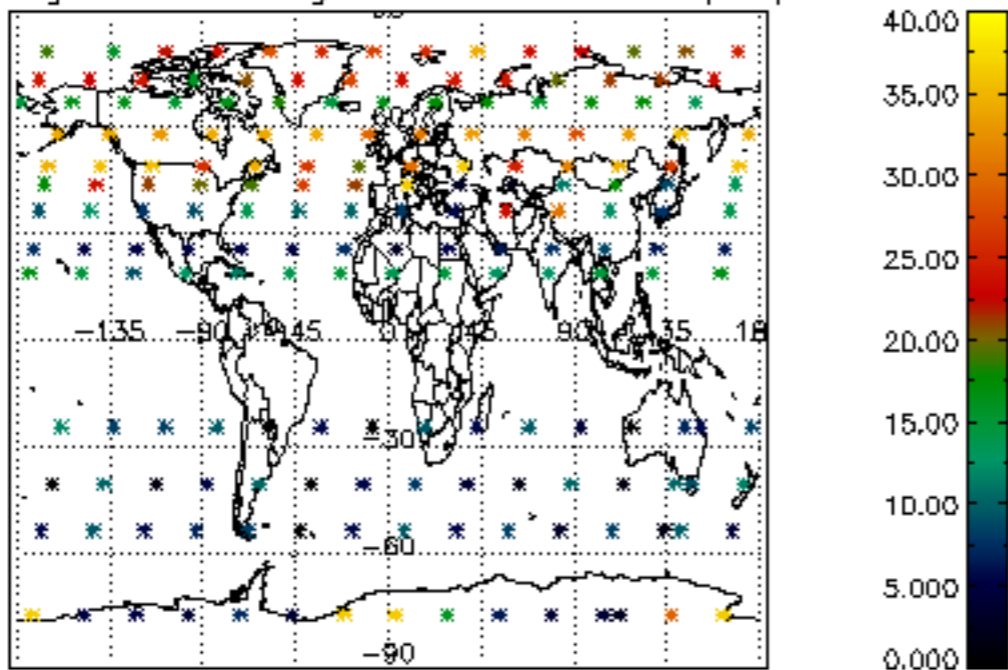
Percentage of cosmic ray hits per profile



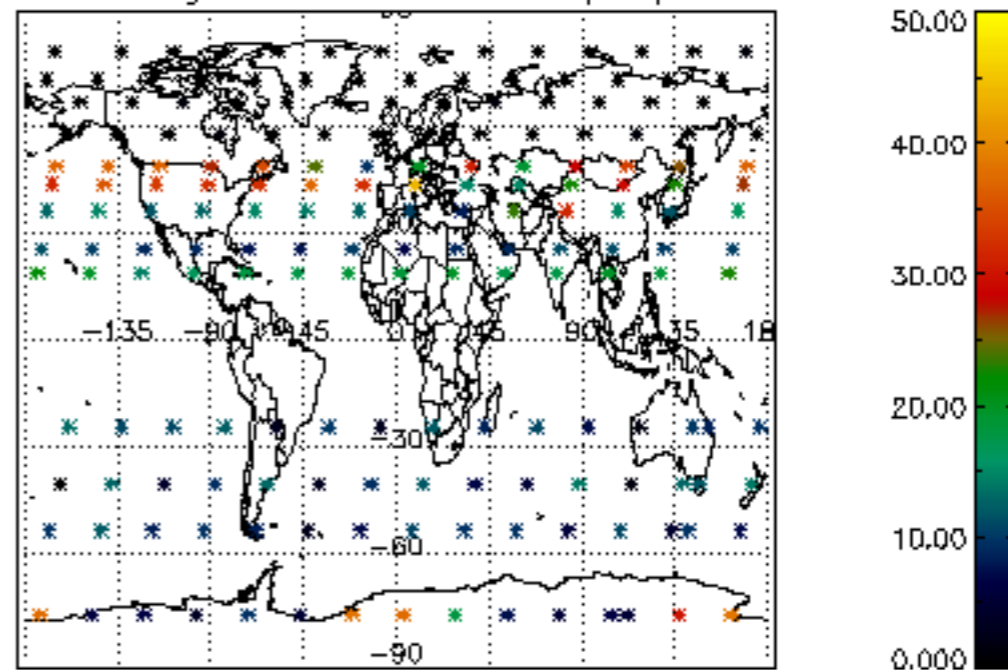
Percentage of datation errors per profile

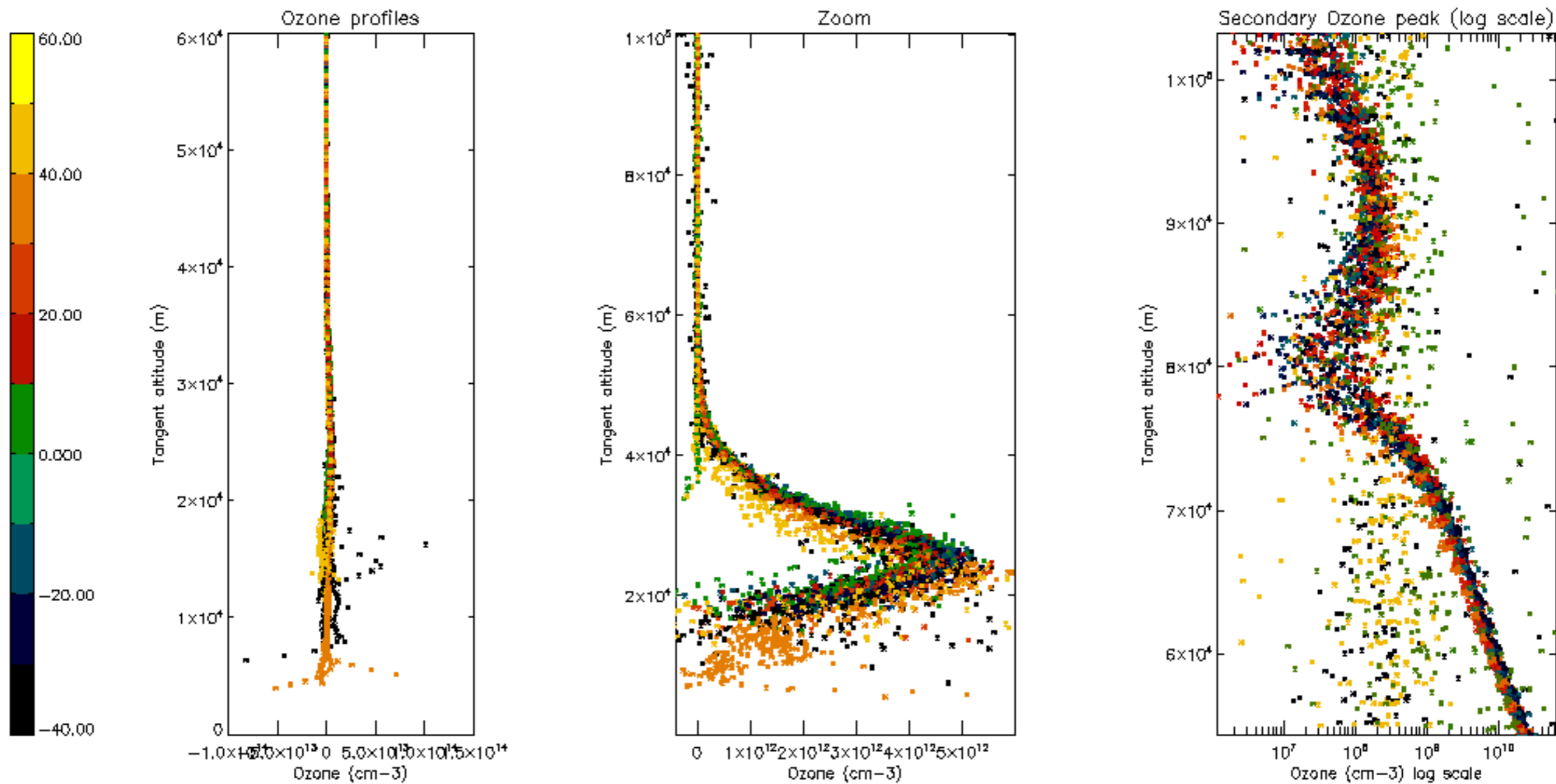


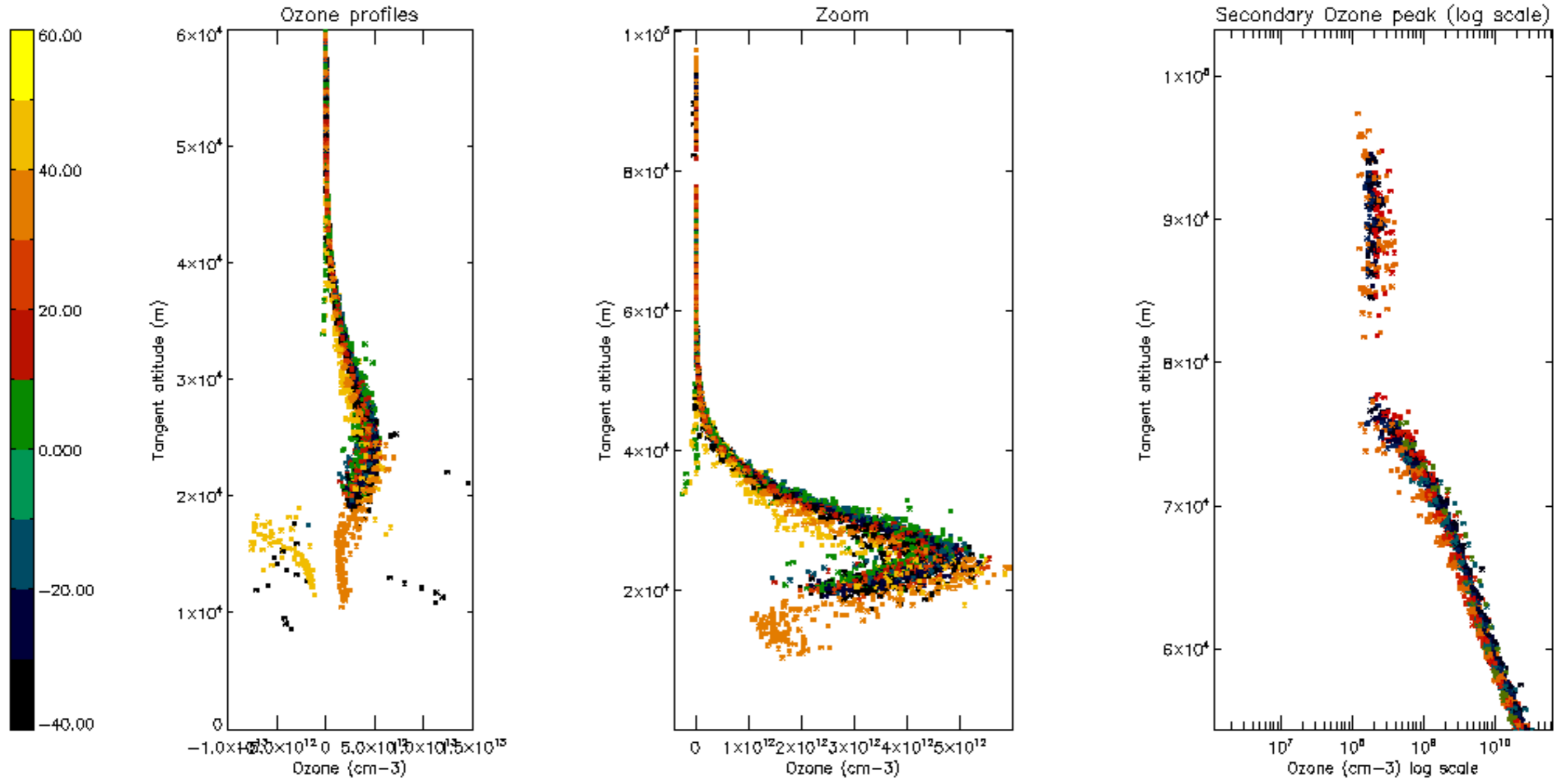
Percentage of star falling outside central band per profile

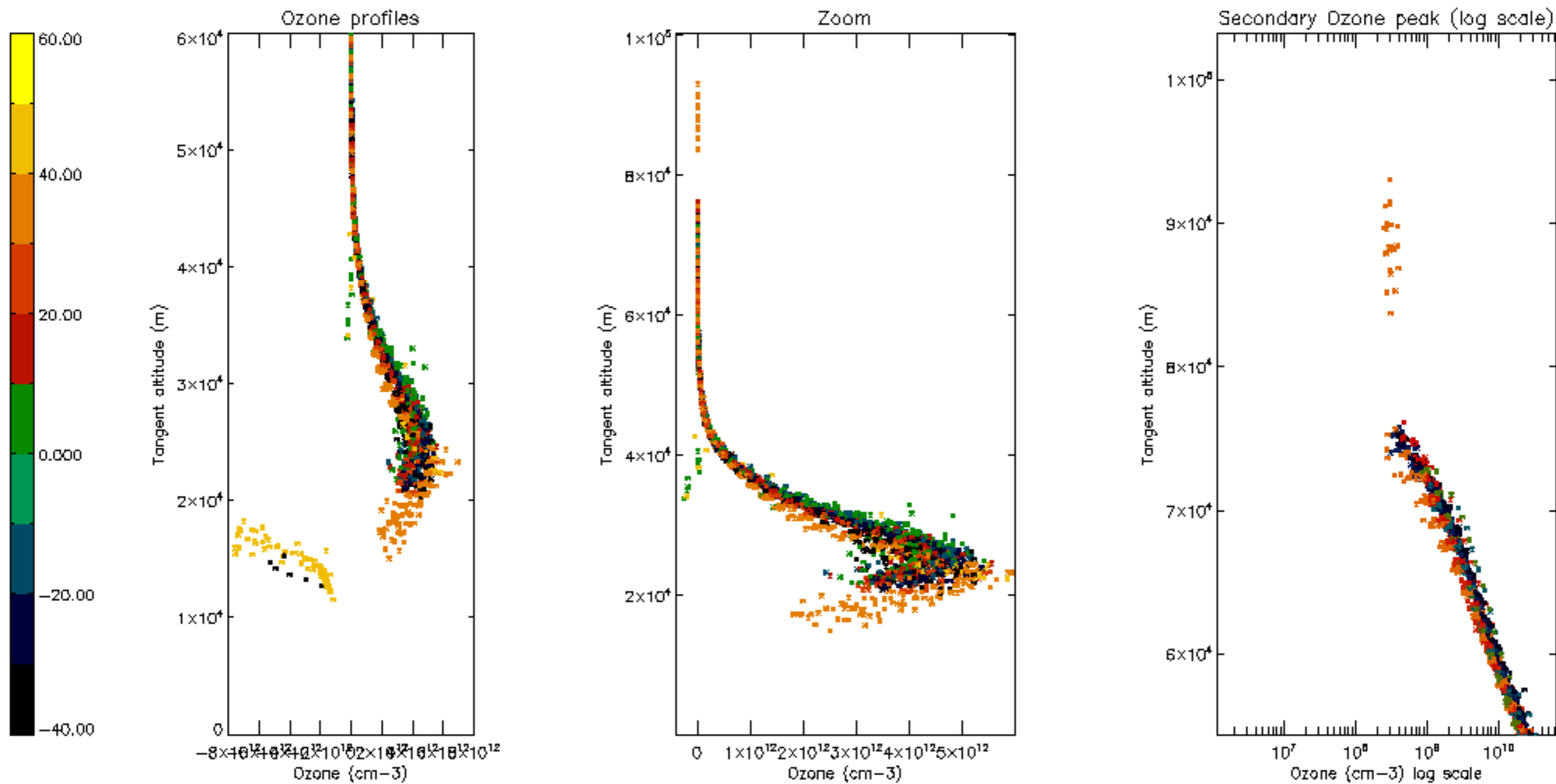


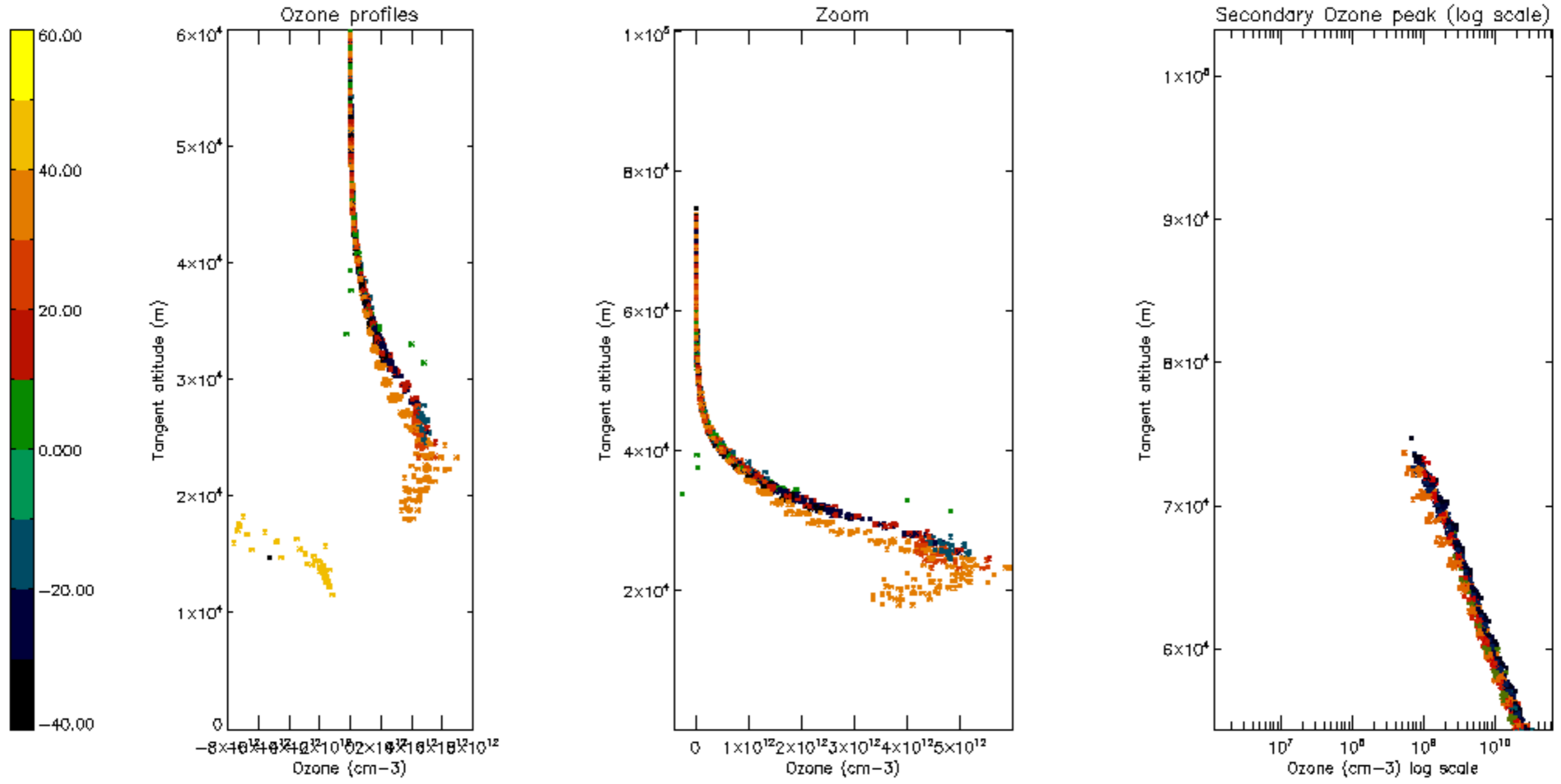
Percentage of saturation errors per profile

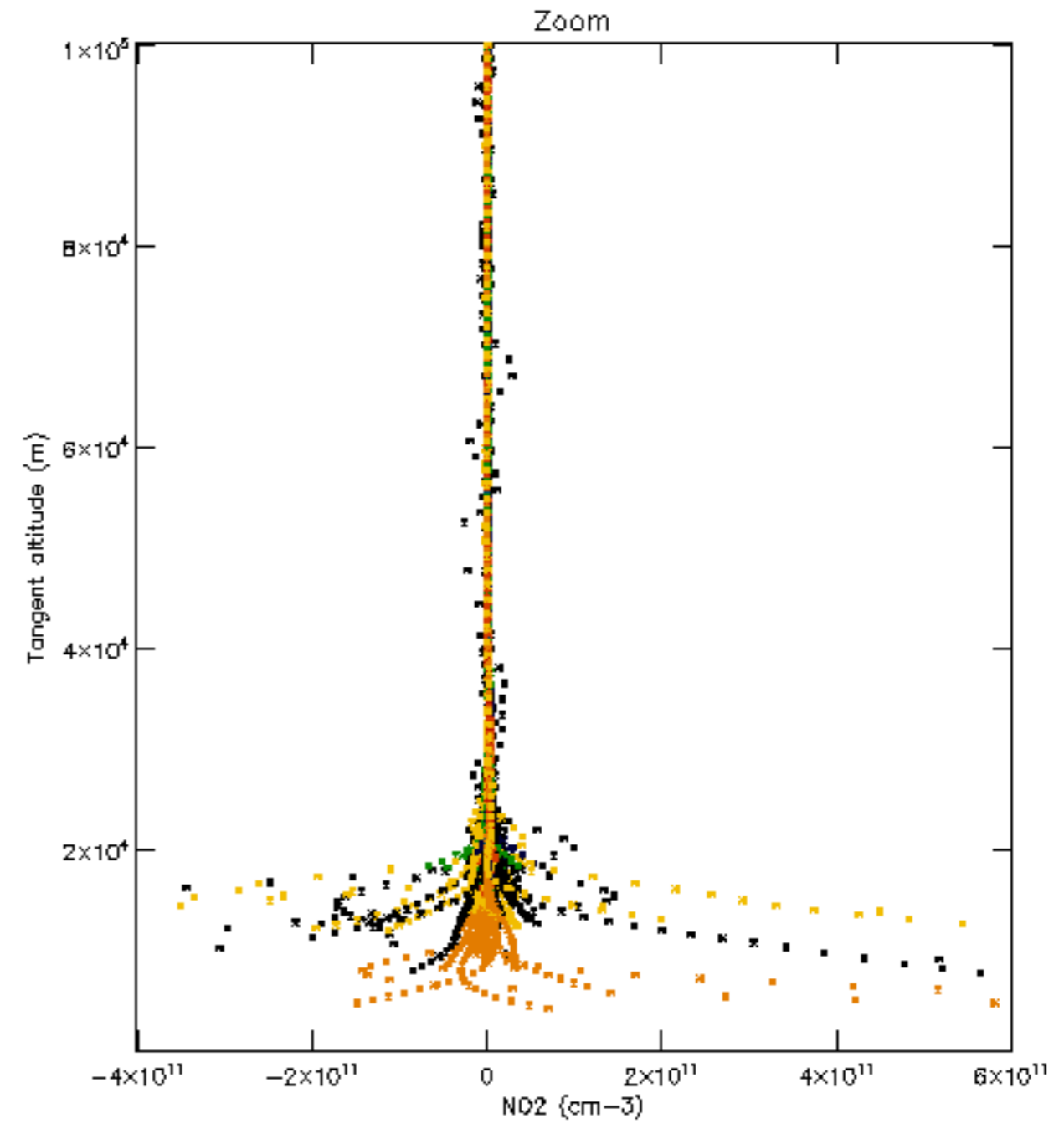
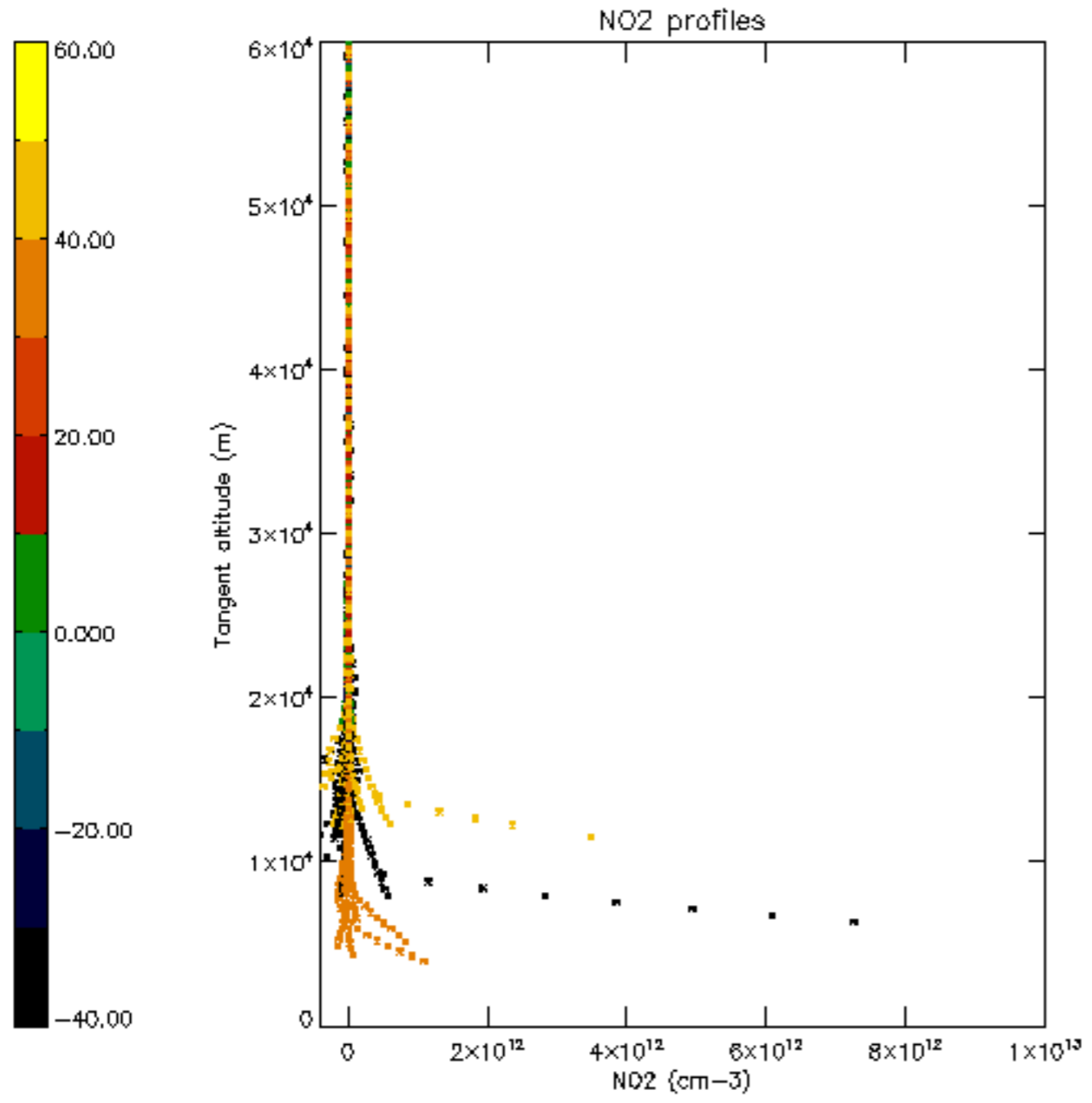


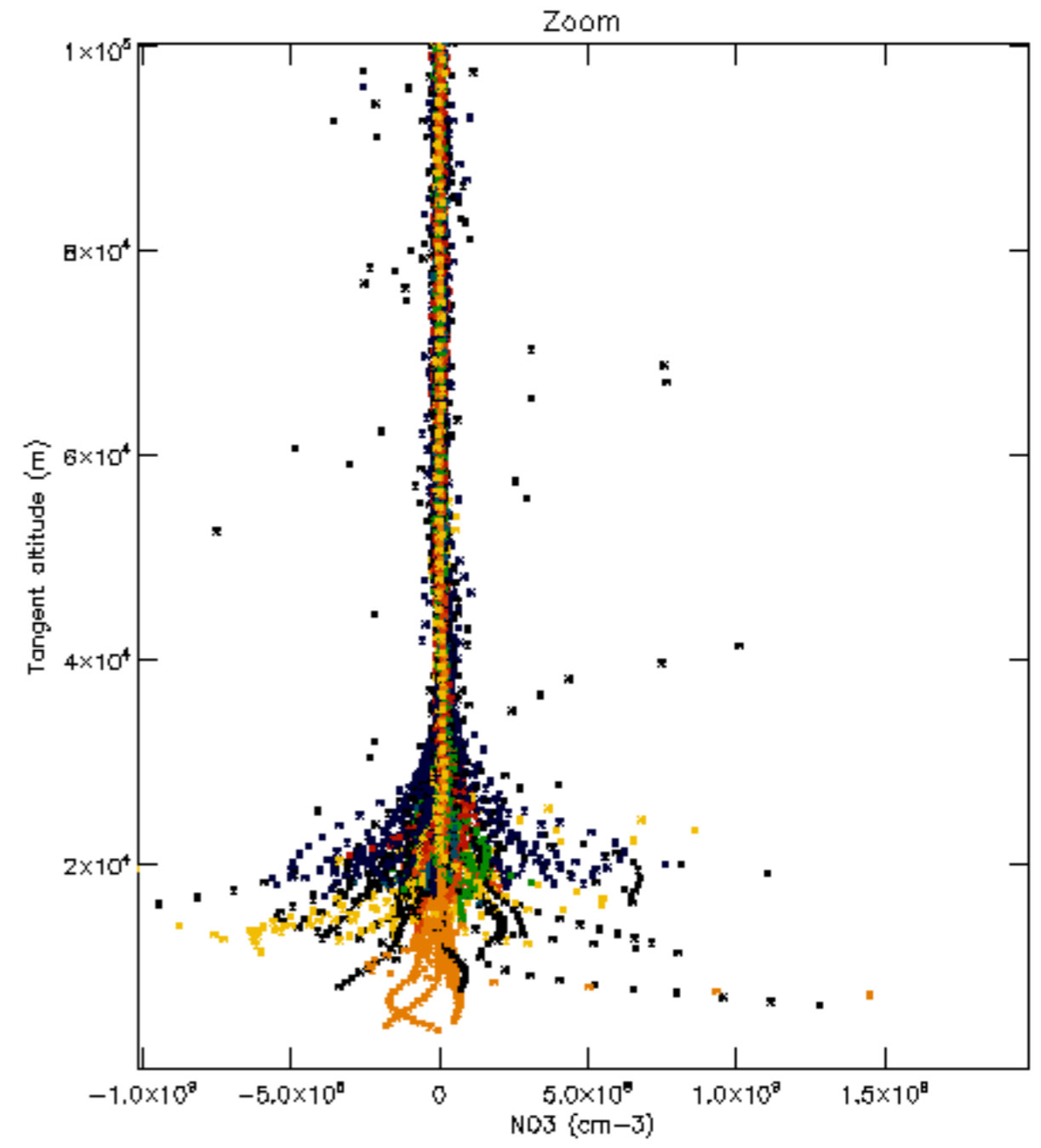
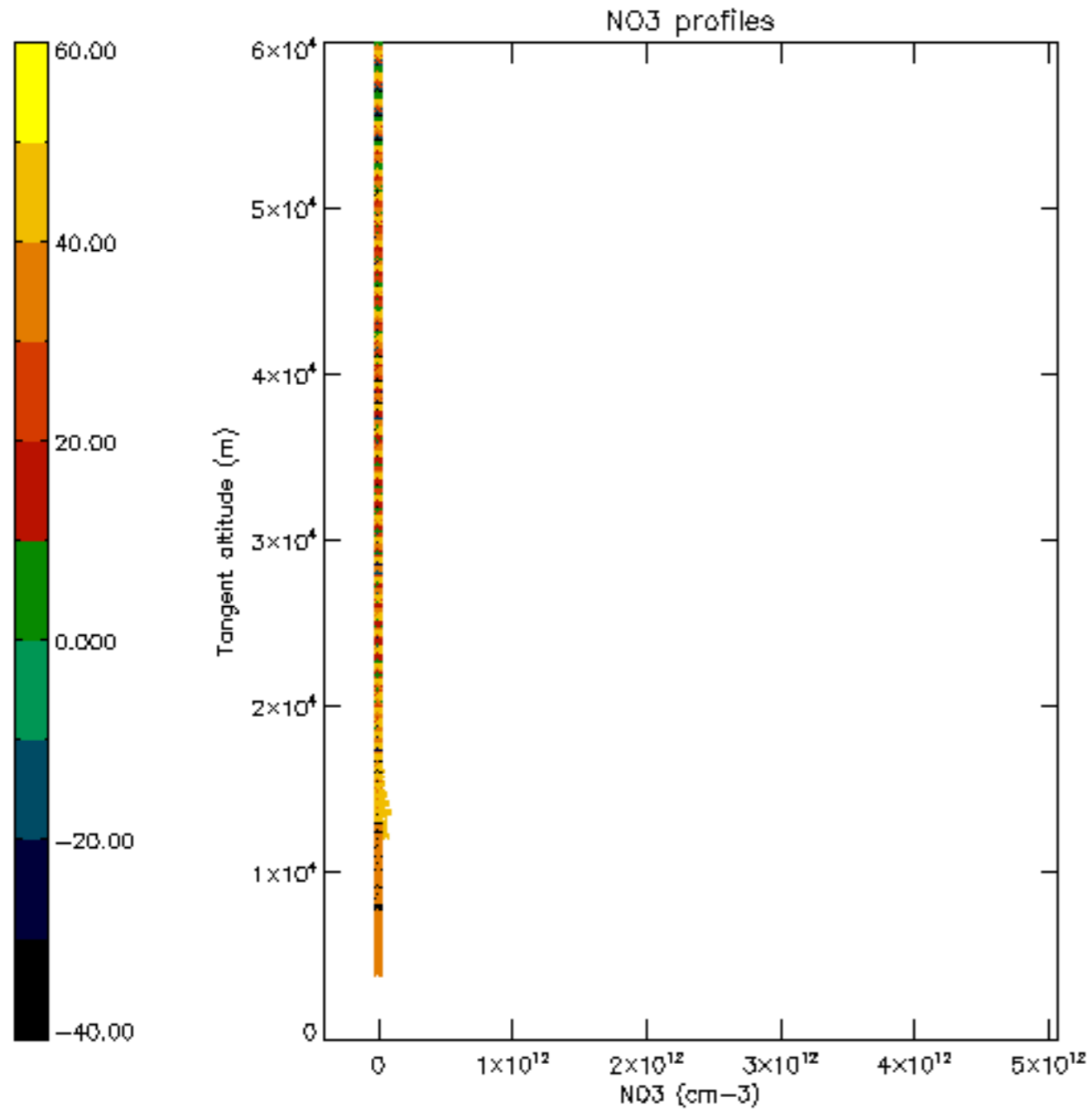


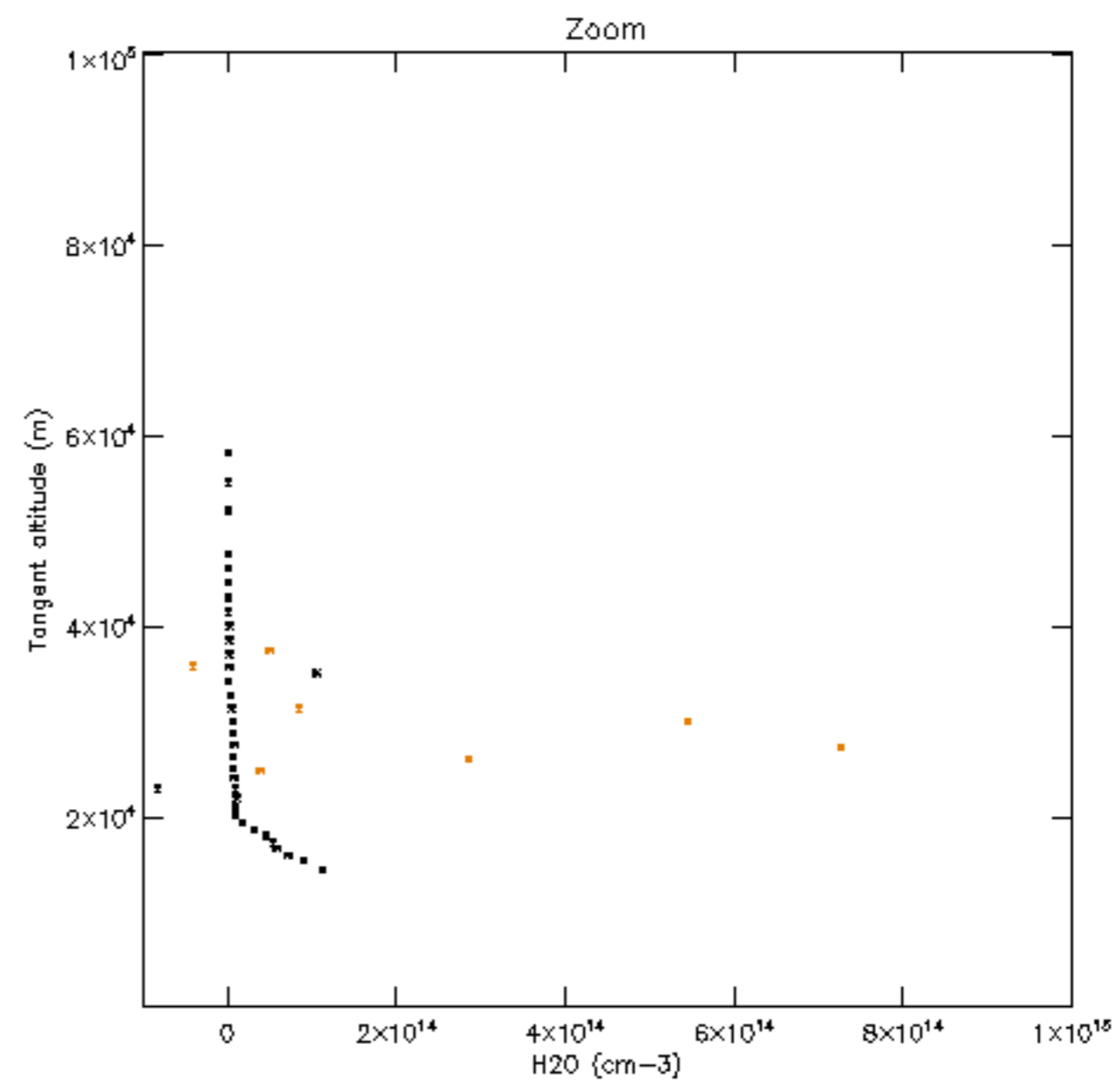
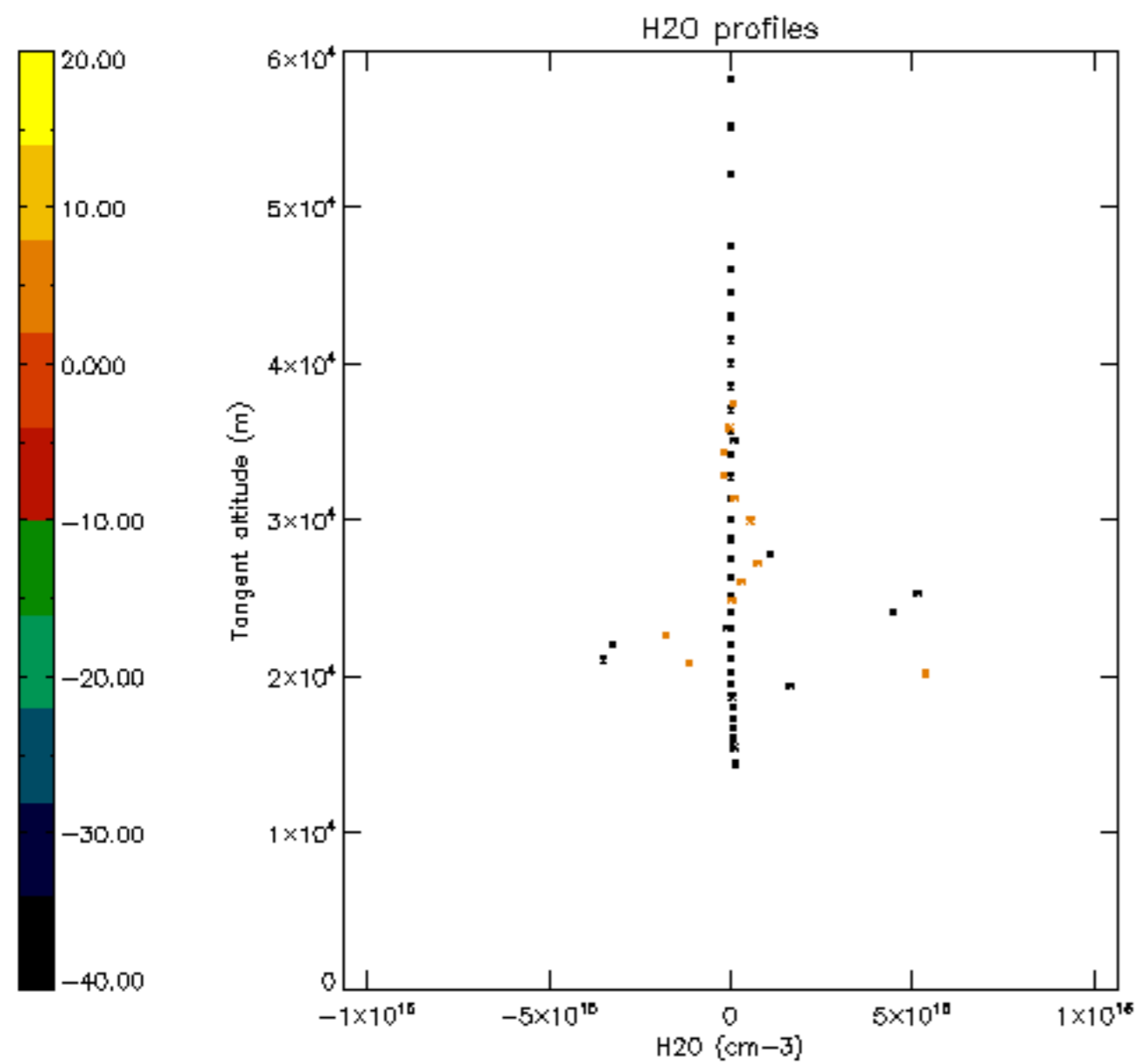


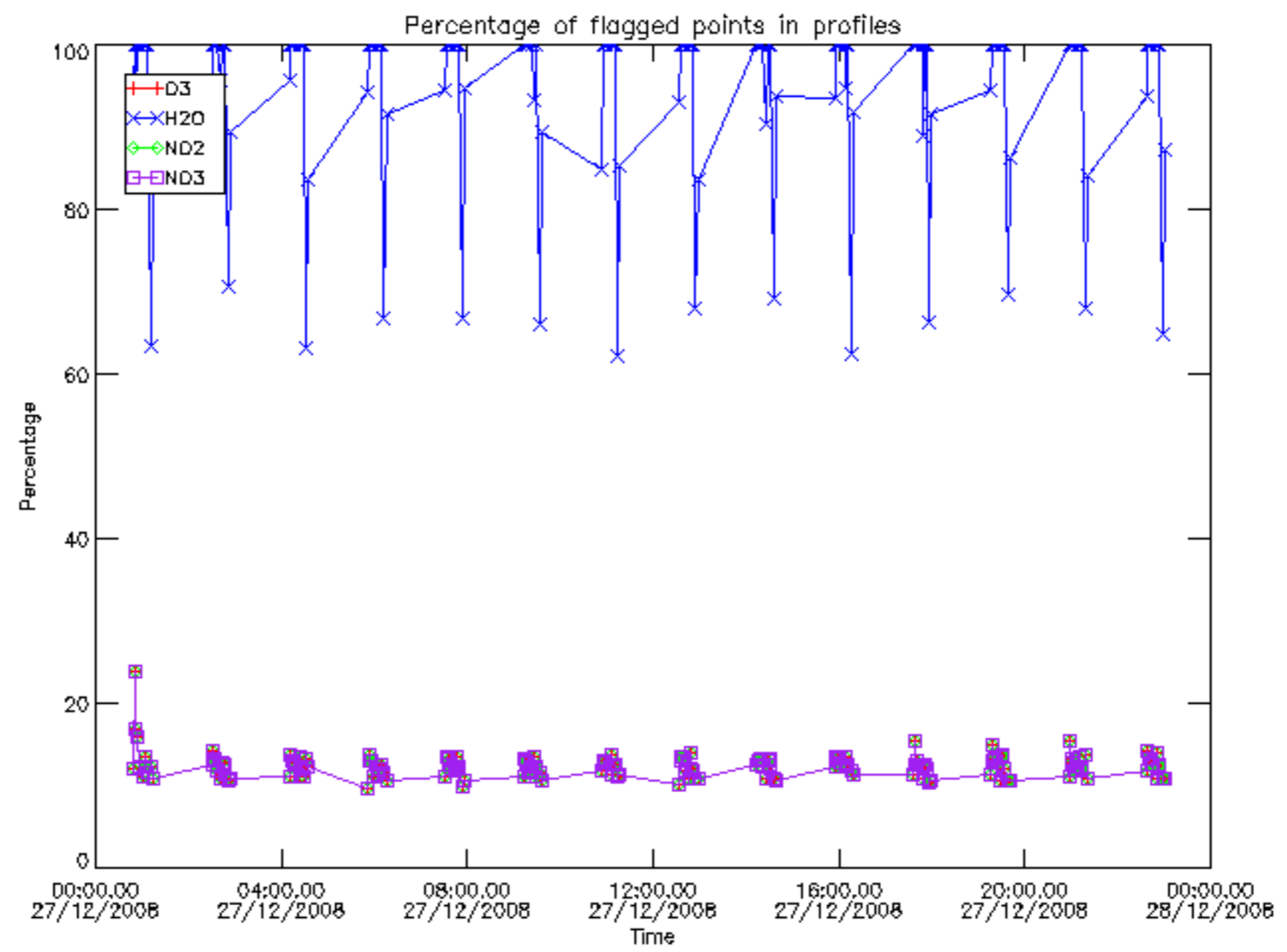




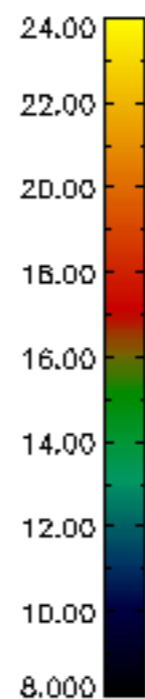
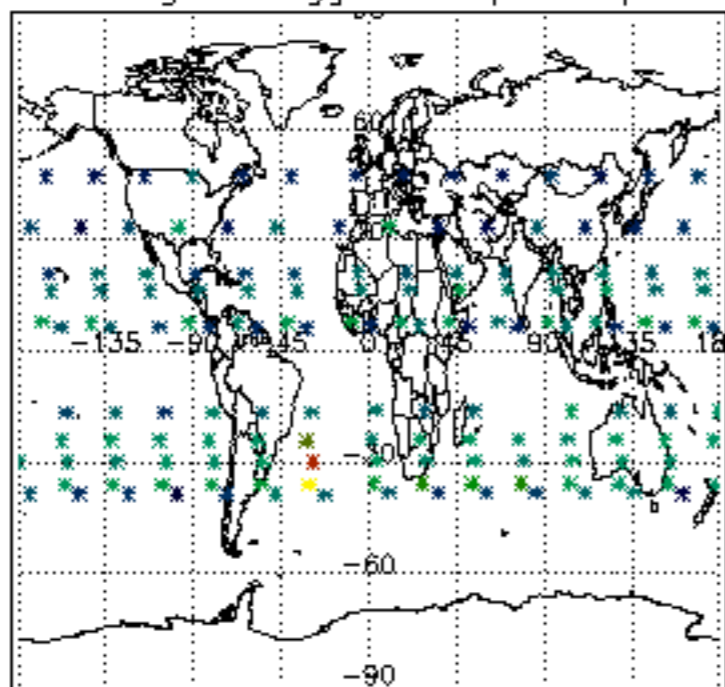




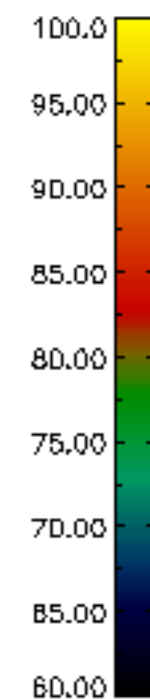
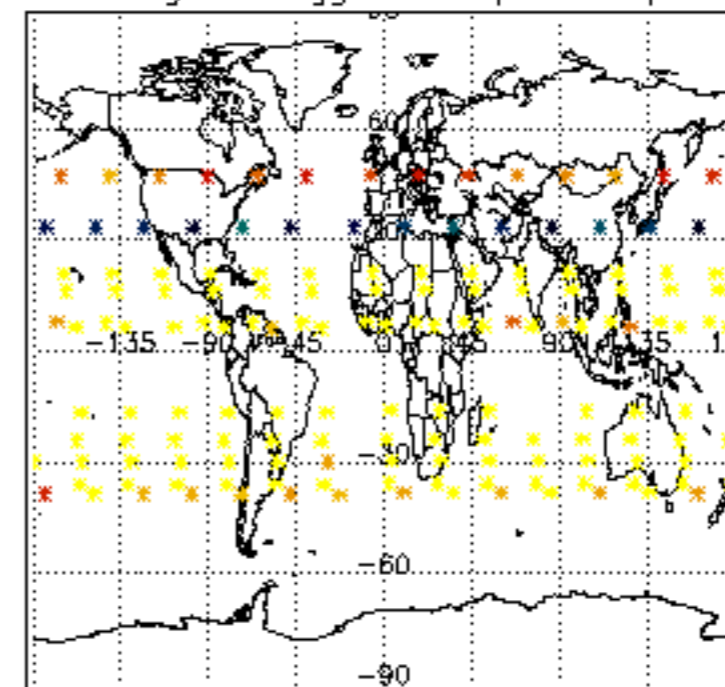




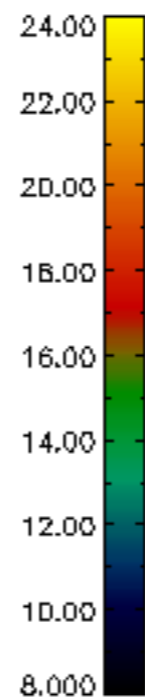
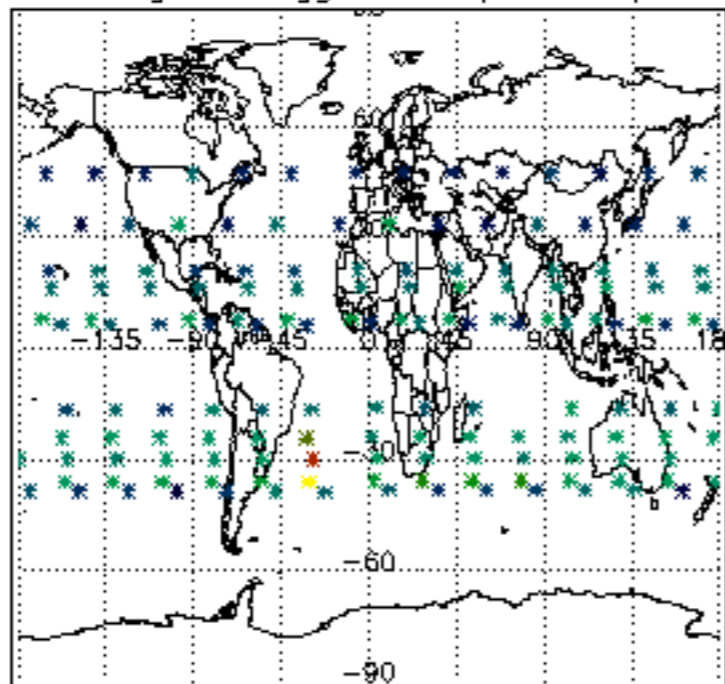
Percentage of flagged data per D3 profile



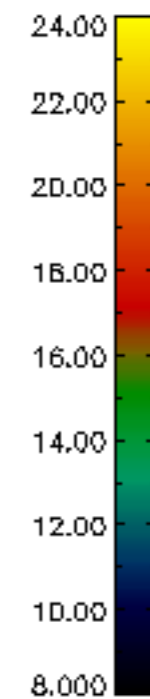
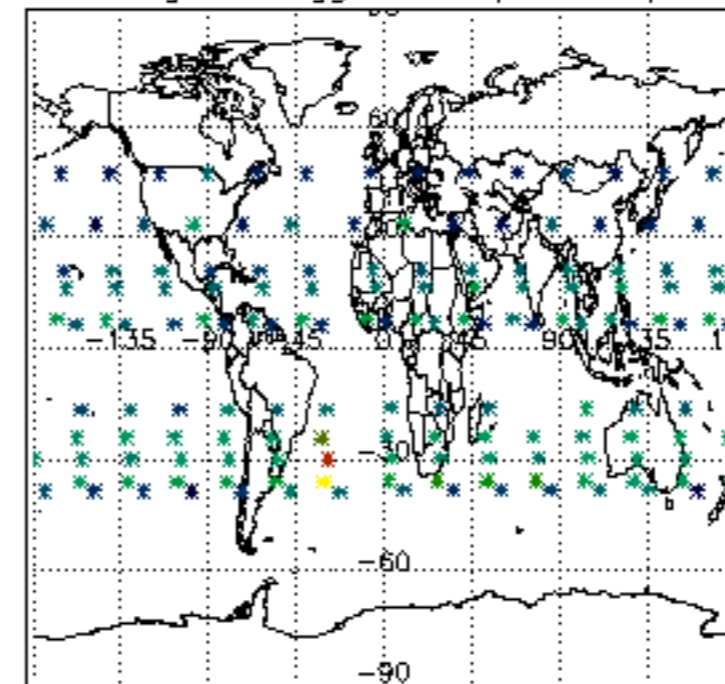
Percentage of flagged data per H2O profile

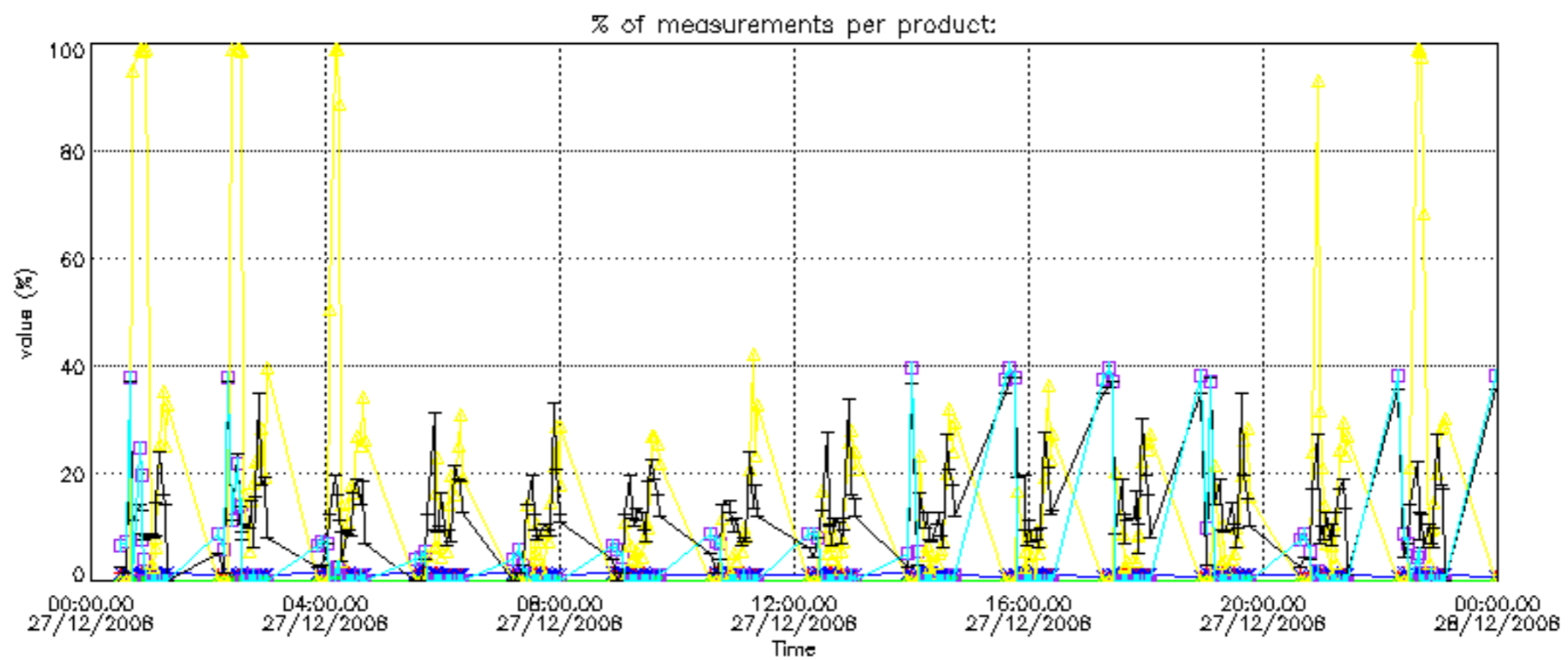


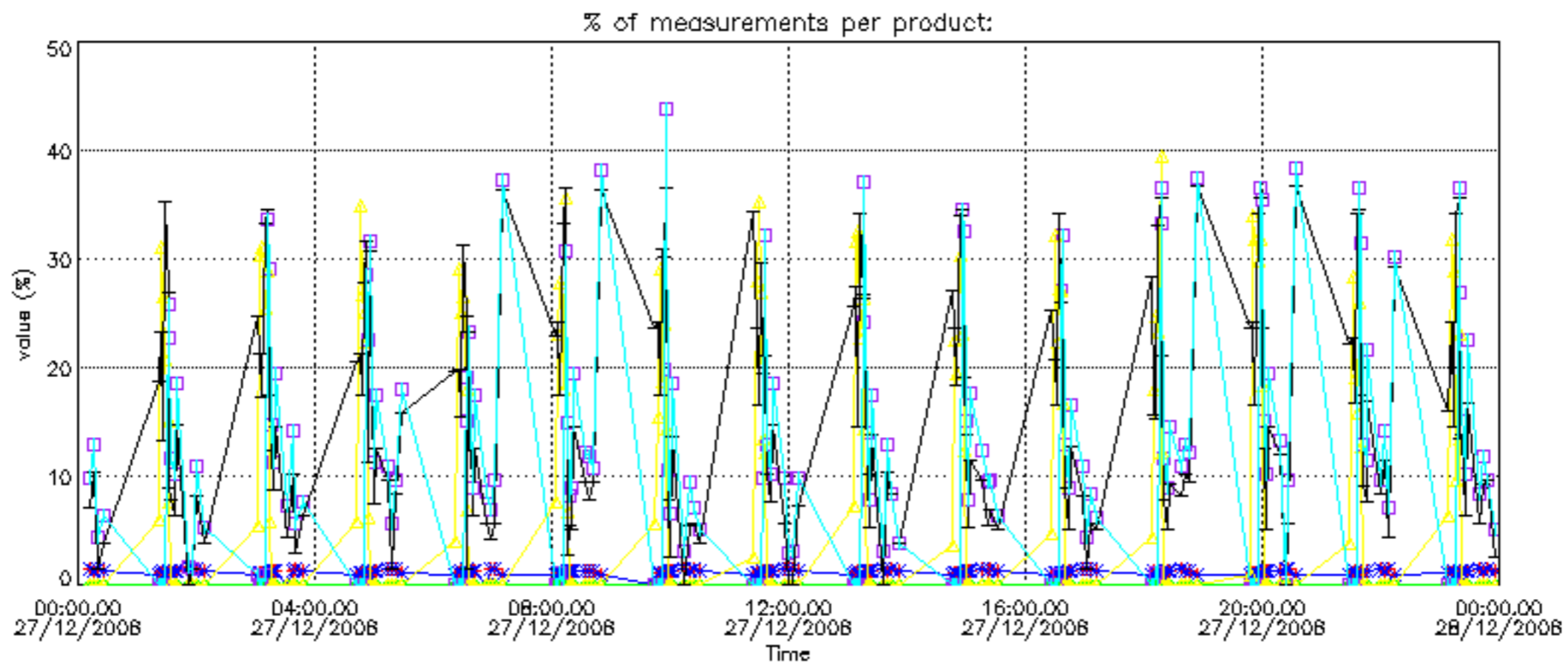
Percentage of flagged data per NO2 profile



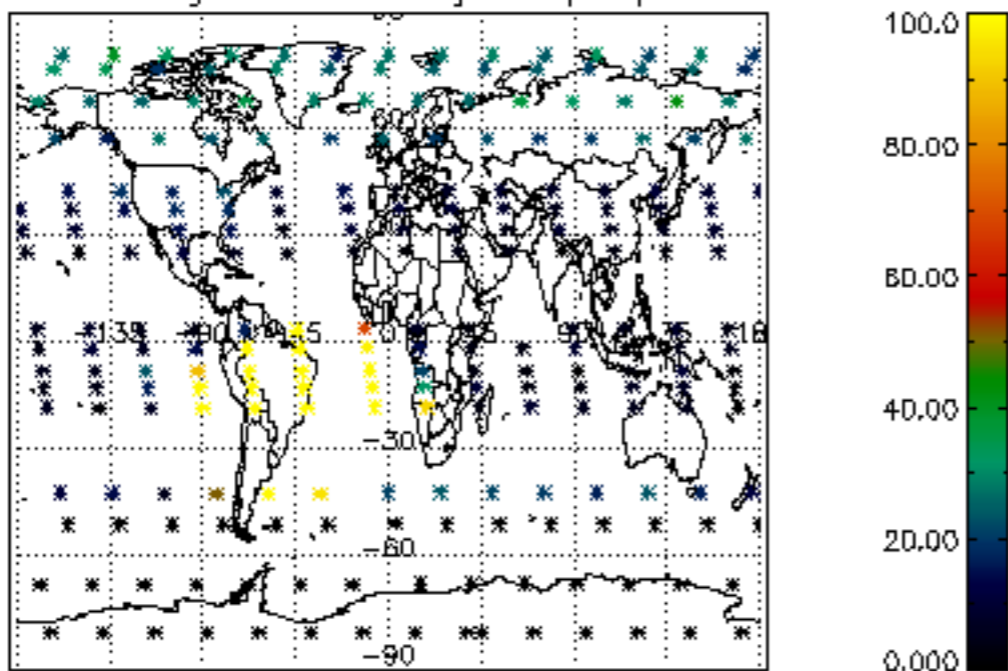
Percentage of flagged data per NO3 profile



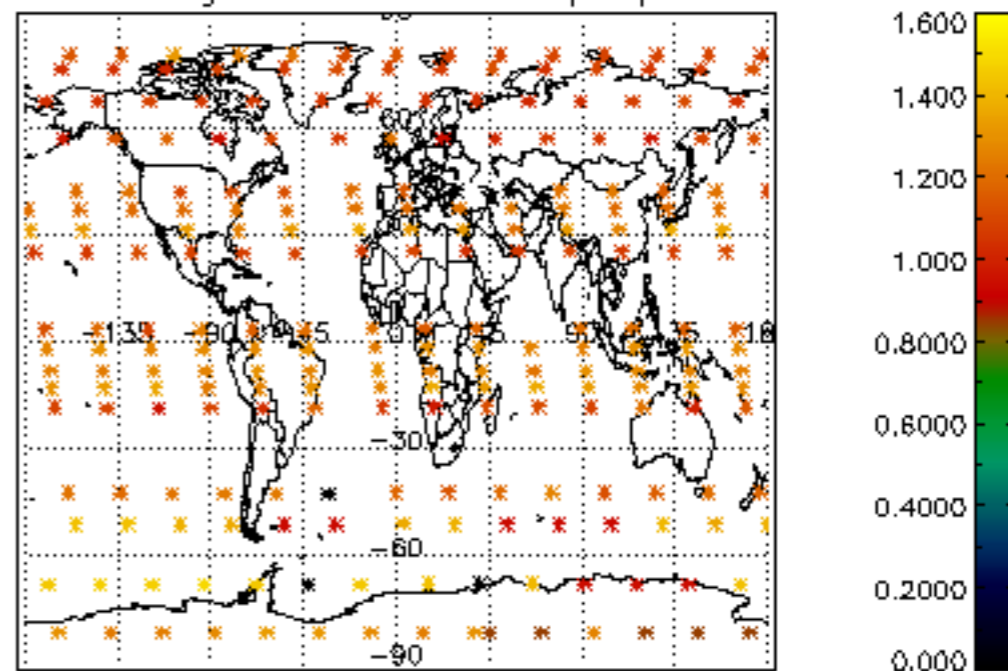




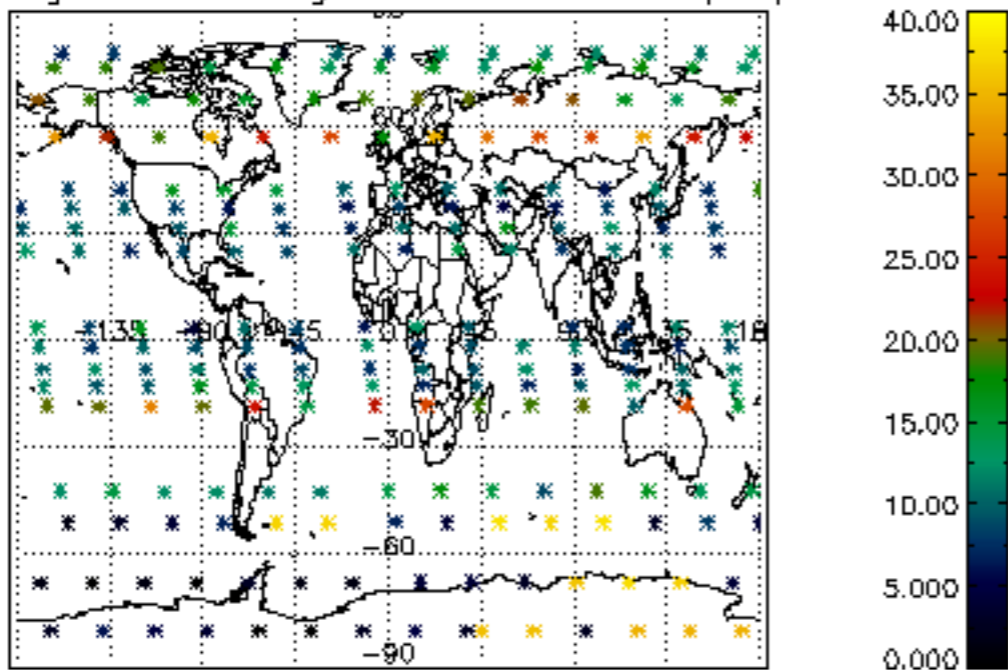
Percentage of cosmic ray hits per profile



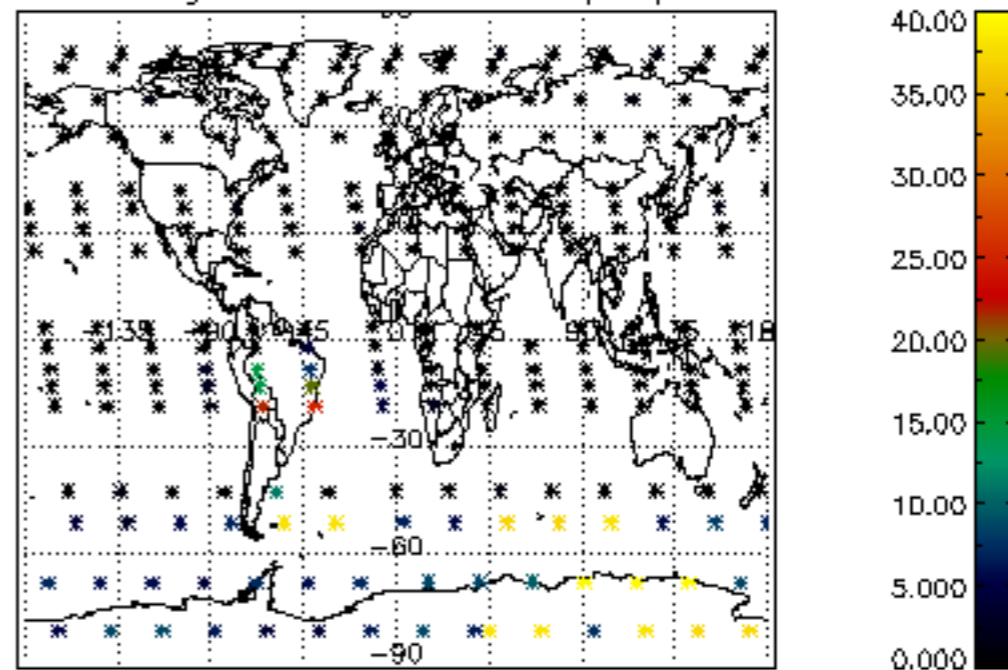
Percentage of datation errors per profile



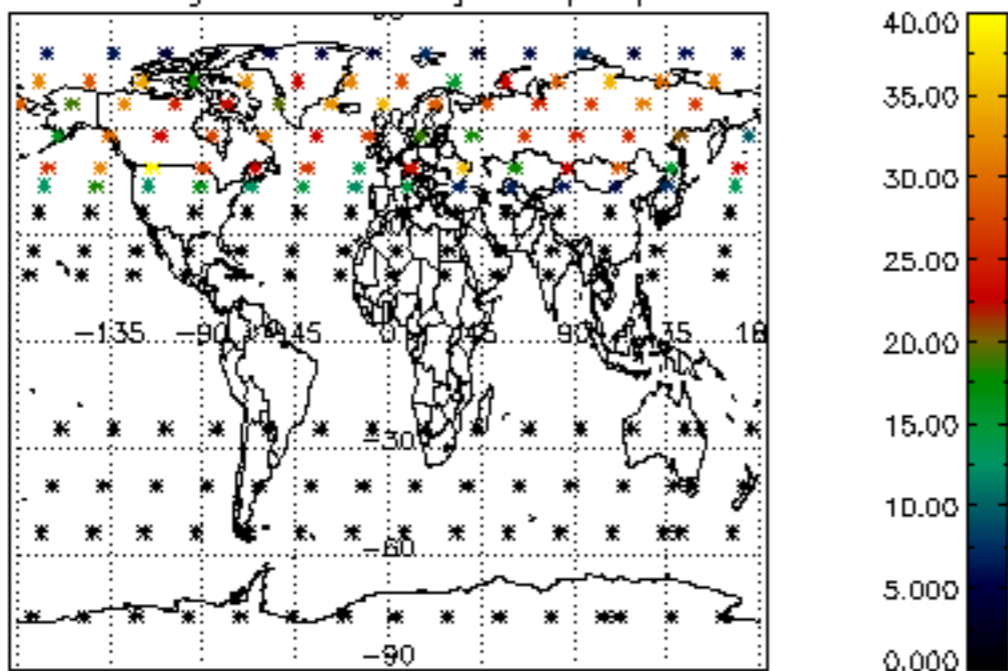
Percentage of star falling outside central band per profile



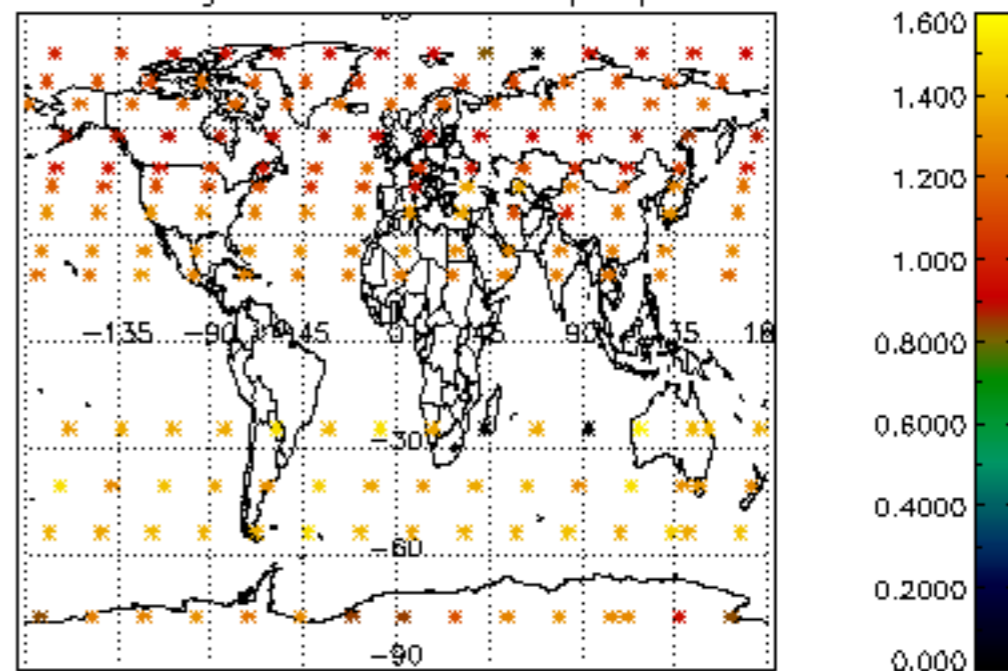
Percentage of saturation errors per profile



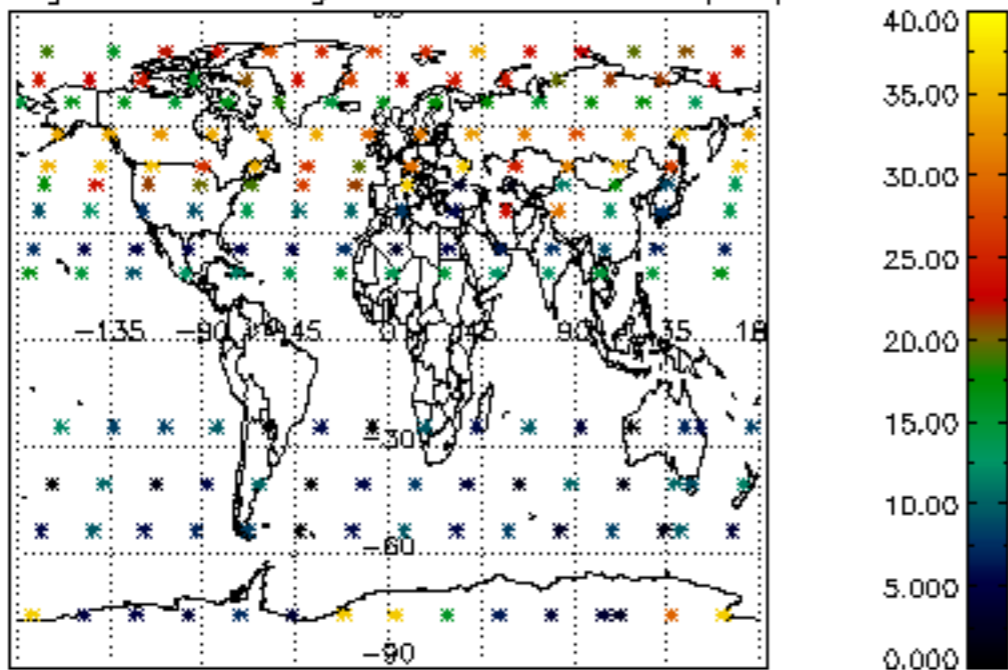
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

