

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 00:01:44
Data source version	GOMOS/6.01
Start time of products	21-12-2008 (21DEC2008 00:00:00)
Stop time of products	22-12-2008 (22DEC2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	420
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

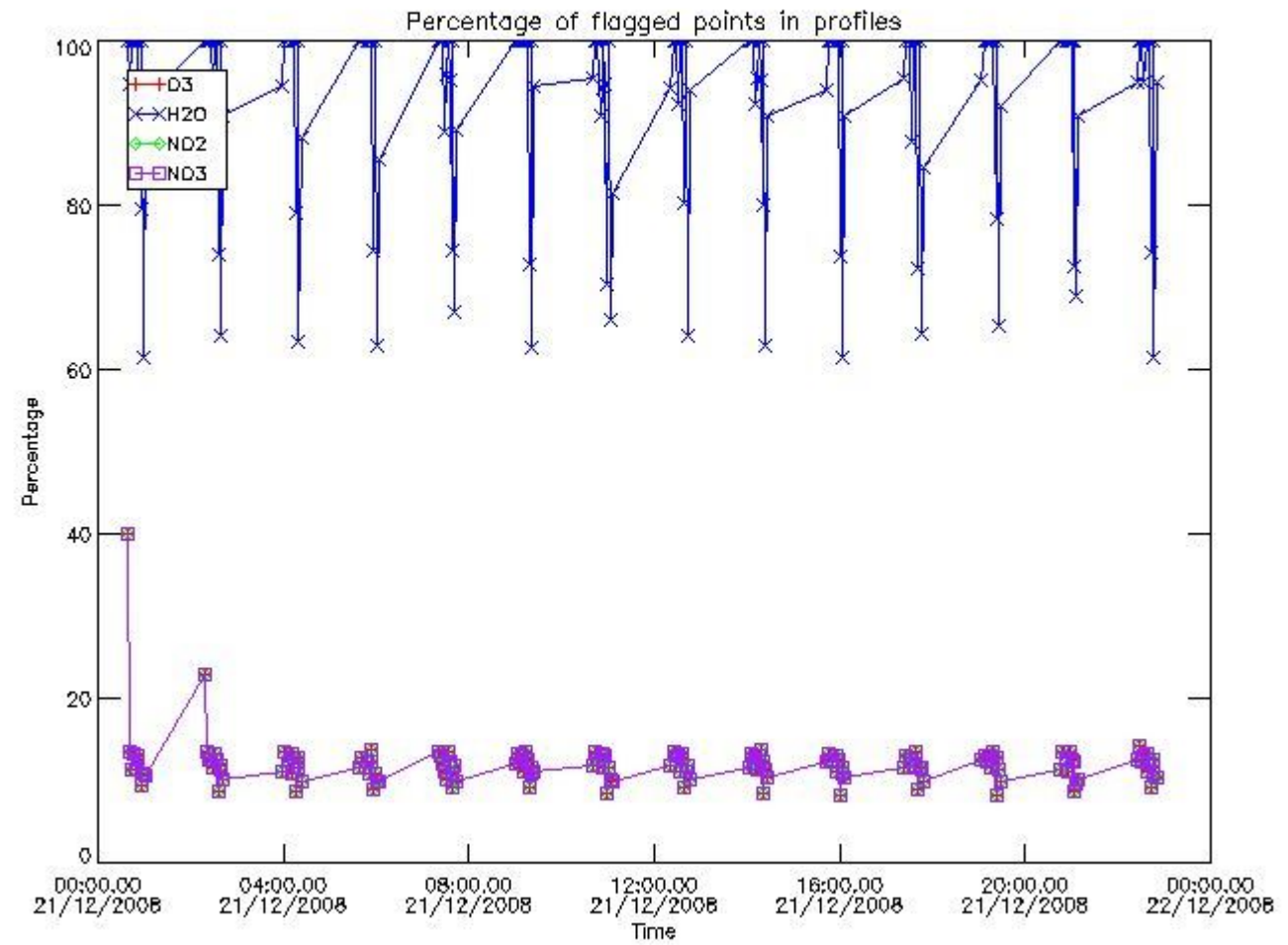
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081221_000425_000000352074_00474_35598_1252.N1	21-DEC-2008 00:04:25	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	35598	No
2	GOM_NL__2PRFIN20081221_000847_000000452074_00474_35598_1253.N1	21-DEC-2008 00:08:47	Bright	44.500	32	77Eps UMa	1.7630	11000.	89	35598	No
3	GOM_NL__2PRFIN20081221_001134_000000602074_00474_35598_1254.N1	21-DEC-2008 00:11:34	Bright	60.000	39	85Eta UMa	1.8540	24000.	120	35598	No
4	GOM_NL__2PRFIN20081221_001507_000000372074_00474_35598_1255.N1	21-DEC-2008 00:15:07	Bright	37.000	180	27Gam Boo	3.0400	8000.0	74	35598	No
5	GOM_NL__2PRFIN20081221_001827_000000372074_00474_35598_1256.N1	21-DEC-2008 00:18:27	Bright	37.000	83		2.3780	11000.	74	35598	No
6	GOM_NL__2PRFIN20081221_002159_000000452074_00474_35598_1257.N1	21-DEC-2008 00:21:59	Bright	45.000	111	8Eta Boo	2.6800	6000.0	90	35598	No
7	GOM_NL__2PRFIN20081221_003042_000000352074_00474_35598_1258.N1	21-DEC-2008 00:30:42	Bright	35.000	122	9Alp2Lib	2.7470	9700.0	70	35598	No
8	GOM_NL__2PRFIN20081221_003230_000000562074_00474_35598_1259.N1	21-DEC-2008 00:32:30	Tw_i_and_stray	55.500	15	67Alp Vir	0.97600	28000.	111	35598	No
9	GOM_NL__2PRFIN20081221_003715_000000462074_00474_35598_1260.N1	21-DEC-2008 00:37:15	Dark	45.500	54	5The Cen	2.0550	4500.0	91	35598	No
10	GOM_NL__2PRFIN20081221_004012_000000382074_00474_35598_1261.N1	21-DEC-2008 00:40:12	Dark	38.000	95	Zet Cen	2.5450	26000.	76	35598	No
11	GOM_NL__2PRFIN20081221_004309_000000452074_00474_35598_1262.N1	21-DEC-2008 00:43:09	Dark	45.000	64	Gam Cen	2.2000	10600.	90	35598	No
12	GOM_NL__2PRFIN20081221_004553_000000462074_00475_35599_1238.N1	21-DEC-2008 00:45:53	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	35599	No
13	GOM_NL__2PRFIN20081221_004856_000000452074_00475_35599_1239.N1	21-DEC-2008 00:48:56	Dark	45.000	113	Mu Vel	2.6920	5000.0	90	35599	No
14	GOM_NL__2PRFIN20081221_005053_000000392074_00475_35599_1240.N1	21-DEC-2008 00:50:53	Dark	39.000	159	Ups Car	2.9200	7200.0	78	35599	No
15	GOM_NL__2PRFIN20081221_005222_000000412074_00475_35599_1241.N1	21-DEC-2008 00:52:22	Dark	41.000	71	Iot Car	2.2460	7700.0	82	35599	No
16	GOM_NL__2PRFIN20081221_005518_000000542074_00475_35599_1242.N1	21-DEC-2008 00:55:18	Dark	54.000	65	Lam Vel	2.2040	4400.0	108	35599	No
17	GOM_NL__2PRFIN20081221_005706_000000482074_00475_35599_1243.N1	21-DEC-2008 00:57:06	Dark	47.500	34	Gam2Vel	1.7930	23000.	95	35599	No
18	GOM_NL__2PRFIN20081221_005851_000000472074_00475_35599_1244.N1	21-DEC-2008 00:58:51	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	35599	No
19	GOM_NL__2PRFIN20081221_010146_000000492074_00475_35599_1245.N1	21-DEC-2008 01:01:46	Dark	48.500	117	Pi Pup	2.7060	3800.0	97	35599	No
20	GOM_NL__2PRFIN20081221_010452_000000522074_00475_35599_1246.N1	21-DEC-2008 01:04:52	Straylight	51.500	23	21Eps CMa	1.5020	26000.	103	35599	No
21	GOM_NL__2PRFIN20081221_010907_000000482074_00475_35599_1247.N1	21-DEC-2008 01:09:07	Straylight	48.000	47	2Bet CMa	1.9760	28000.	96	35599	No
22	GOM_NL__2PRFIN20081221_011233_000000452074_00475_35599_1248.N1	21-DEC-2008 01:12:33	Straylight	45.000	7	19Bet Ori	0.10000	14000.	90	35599	No
23	GOM_NL__2PRFIN20081221_011439_000000462074_00475_35599_1249.N1	21-DEC-2008 01:14:39	Straylight	45.500	30	46Eps Ori	1.6940	30000.	91	35599	No
24	GOM_NL__2PRFIN20081221_011732_000000572074_00475_35599_1250.N1	21-DEC-2008 01:17:32	Tw_i_and_stray	57.000	14	58Alp Ori	0.87000	3000.0	114	35599	No
25	GOM_NL__2PRFIN20081221_011947_000000472074_00475_35599_1251.N1	21-DEC-2008 01:19:47	Tw_i_and_stray	46.500	13	87Alp Tau	0.86700	3800.0	93	35599	No
26	GOM_NL__2PRFIN20081221_012138_000000422074_00475_35599_1252.N1	21-DEC-2008 01:21:38	Bright	41.500	176	23Zet Tau	3.0200	22000.	83	35599	No
27	GOM_NL__2PRFIN20081221_012342_000000402074_00475_35599_1253.N1	21-DEC-2008 01:23:42	Bright	39.500	28	12Bet Tau	1.6500	15200.	79	35599	No
28	GOM_NL__2PRFIN20081221_012702_000000422074_00475_35599_1254.N1	21-DEC-2008 01:27:02	Bright	42.000	107	37The Aur	2.6490	11000.	84	35599	No
29	GOM_NL__2PRFIN20081221_012837_000000432074_00475_35599_1255.N1	21-DEC-2008 01:28:37	Bright	43.000	6	13Alp Aur	0.080000	3400.0	86	35599	No
30	GOM_NL__2PRFIN20081221_014021_000000352074_00475_35599_1256.N1	21-DEC-2008 01:40:21	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	35599	No
31	GOM_NL__2PRFIN20081221_014501_000000382074_00475_35599_1257.N1	21-DEC-2008 01:45:01	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	35599	No
32	GOM_NL__2PRFIN20081221_014922_000000462074_00475_35599_1258.N1	21-DEC-2008 01:49:22	Bright	45.500	32	77Eps UMa	1.7630	11000.	91	35599	No
33	GOM_NL__2PRFIN20081221_015210_000000422074_00475_35599_1259.N1	21-DEC-2008 01:52:10	Bright	42.000	39	85Eta UMa	1.8540	24000.	84	35599	No
34	GOM_NL__2PRFIN20081221_015543_000000382074_00475_35599_1260.N1	21-DEC-2008 01:55:43	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	35599	No
35	GOM_NL__2PRFIN20081221_015903_000000562074_00475_35599_1261.N1	21-DEC-2008 01:59:03	Bright	56.000	83		2.3780	11000.	112	35599	No
36	GOM_NL__2PRFIN20081221_020235_000000452074_00475_35599_1262.N1	21-DEC-2008 02:02:35	Bright	44.500	111	8Eta Boo	2.6800	6000.0	89	35599	No
37	GOM_NL__2PRFIN20081221_021118_000000372074_00475_35599_1263.N1	21-DEC-2008 02:11:18	Bright	37.000	122	9Alp2Lib	2.7470	9700.0	74	35599	No
38	GOM_NL__2PRFIN20081221_021307_000000552074_00475_35599_1264.N1	21-DEC-2008 02:13:07	Tw_i_and_stray	54.500	15	67Alp Vir	0.97600	28000.	109	35599	No
39	GOM_NL__2PRFIN20081221_021751_000000472074_00475_35599_1265.N1	21-DEC-2008 02:17:51	Dark	46.500	54	5The Cen	2.0550	4500.0	93	35599	No
40	GOM_NL__2PRFIN20081221_022048_000000382074_00475_35599_1266.N1	21-DEC-2008 02:20:48	Dark	37.500	95	Zet Cen	2.5450	26000.	75	35599	No
41	GOM_NL__2PRFIN20081221_022346_000000412074_00475_35599_1267.N1	21-DEC-2008 02:23:46	Dark	40.500	64	Gam Cen	2.2000	10600.	81	35599	No
42	GOM_NL__2PRFIN20081221_022630_000000412074_00476_35600_1116.N1	21-DEC-2008 02:26:30	Dark	41.000	12	Alp1Cru	0.77500	30000.	82	35600	No

397	GOM_NL__2PRFIN20081221_223846_000000392074_00488_35612_1343.N1	21-DEC-2008 22:38:46	Dark	38.500	159	Ups Car	2.9200	7200.0	77	35612	No
398	GOM_NL__2PRFIN20081221_224017_000000432074_00488_35612_1344.N1	21-DEC-2008 22:40:17	Dark	42.500	71	lot Car	2.2460	7700.0	85	35612	No
399	GOM_NL__2PRFIN20081221_224317_000000552074_00488_35612_1345.N1	21-DEC-2008 22:43:17	Dark	55.000	65	Lam Vel	2.2040	4400.0	110	35612	No
400	GOM_NL__2PRFIN20081221_224502_000000452074_00488_35612_1346.N1	21-DEC-2008 22:45:02	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	35612	No
401	GOM_NL__2PRFIN20081221_224642_000000472074_00488_35612_1347.N1	21-DEC-2008 22:46:42	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	35612	No
402	GOM_NL__2PRFIN20081221_224940_000000502074_00488_35612_1348.N1	21-DEC-2008 22:49:40	Dark	49.500	117	Pi Pup	2.7060	3800.0	99	35612	No
403	GOM_NL__2PRFIN20081221_225243_000000482074_00488_35612_1349.N1	21-DEC-2008 22:52:43	Straylight	48.000	23	21Eps CMa	1.5020	26000.	96	35612	No
404	GOM_NL__2PRFIN20081221_225656_000000482074_00488_35612_1350.N1	21-DEC-2008 22:56:56	Straylight	48.000	47	2Bet CMa	1.9760	28000.	96	35612	No
405	GOM_NL__2PRFIN20081221_230021_000000462074_00488_35612_1351.N1	21-DEC-2008 23:00:21	Straylight	46.000	7	19Bet Ori	0.10000	14000.	92	35612	No
406	GOM_NL__2PRFIN20081221_230225_000000472074_00488_35612_1352.N1	21-DEC-2008 23:02:25	Straylight	47.000	30	46Eps Ori	1.6940	30000.	94	35612	No
407	GOM_NL__2PRFIN20081221_230517_000000562074_00488_35612_1353.N1	21-DEC-2008 23:05:17	Tw_i_and_stray	56.000	14	58Alp Ori	0.87000	3000.0	112	35612	No
408	GOM_NL__2PRFIN20081221_230734_000000442074_00488_35612_1354.N1	21-DEC-2008 23:07:34	Tw_i_and_stray	43.500	13	87Alp Tau	0.86700	3800.0	87	35612	No
409	GOM_NL__2PRFIN20081221_230921_000000402074_00488_35612_1355.N1	21-DEC-2008 23:09:21	Bright	39.500	176	23Zet Tau	3.0200	22000.	79	35612	No
410	GOM_NL__2PRFIN20081221_231126_000000412074_00488_35612_1356.N1	21-DEC-2008 23:11:26	Bright	41.000	28	12Bet Tau	1.6500	15200.	82	35612	No
411	GOM_NL__2PRFIN20081221_231443_000000412074_00488_35612_1357.N1	21-DEC-2008 23:14:43	Bright	41.000	107	37The Aur	2.6490	11000.	82	35612	No
412	GOM_NL__2PRFIN20081221_231621_000000402074_00488_35612_1358.N1	21-DEC-2008 23:16:21	Bright	39.500	6	13Alp Aur	0.080000	3400.0	79	35612	No
413	GOM_NL__2PRFIN20081221_232808_000000362074_00488_35612_1359.N1	21-DEC-2008 23:28:08	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	35612	No
414	GOM_NL__2PRFIN20081221_233247_000000382074_00488_35612_1360.N1	21-DEC-2008 23:32:47	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	35612	No
415	GOM_NL__2PRFIN20081221_233706_000000642074_00488_35612_1361.N1	21-DEC-2008 23:37:06	Bright	64.000	32	77Eps UMa	1.7630	11000.	128	35612	No
416	GOM_NL__2PRFIN20081221_233956_000000442074_00488_35612_1362.N1	21-DEC-2008 23:39:56	Bright	43.500	39	85Eta UMa	1.8540	24000.	87	35612	No
417	GOM_NL__2PRFIN20081221_234331_000000382074_00488_35612_1363.N1	21-DEC-2008 23:43:31	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	35612	No
418	GOM_NL__2PRFIN20081221_234653_000000392074_00488_35612_1364.N1	21-DEC-2008 23:46:53	Bright	38.500	83		2.3780	11000.	77	35612	No
419	GOM_NL__2PRFIN20081221_234945_000000442074_00488_35612_1365.N1	21-DEC-2008 23:49:45	Bright	44.000	3	16Alp Boo	-0.050000	4250.0	88	35612	No
420	GOM_NL__2PRFIN20081221_235910_000000382074_00488_35612_1366.N1	21-DEC-2008 23:59:10	Bright	37.500	122	9Alp2Lib	2.7470	9700.0	75	35612	No

3. Quality information per product

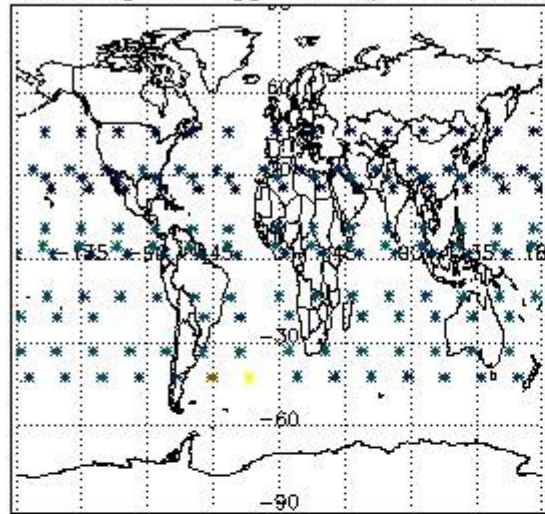
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

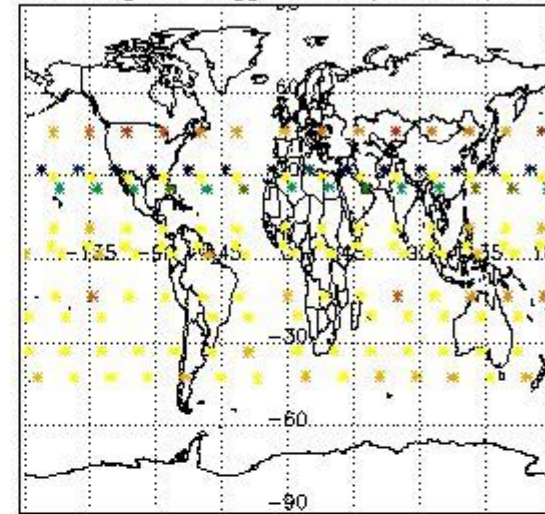


3.2 Plot quality information per product (world map)

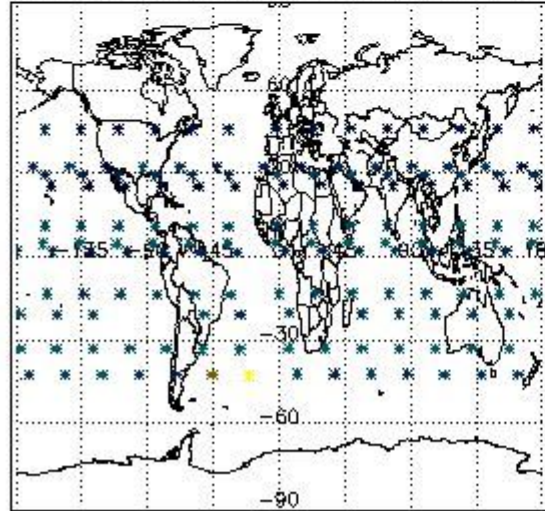
Percentage of flagged data per O3 profile



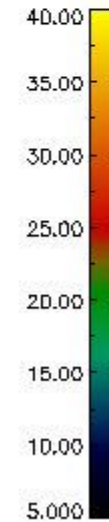
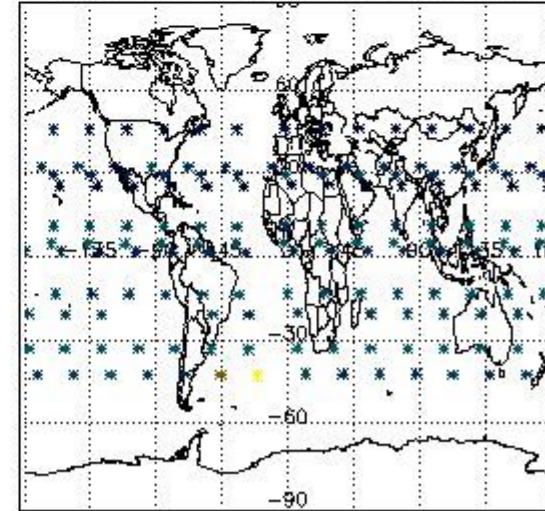
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

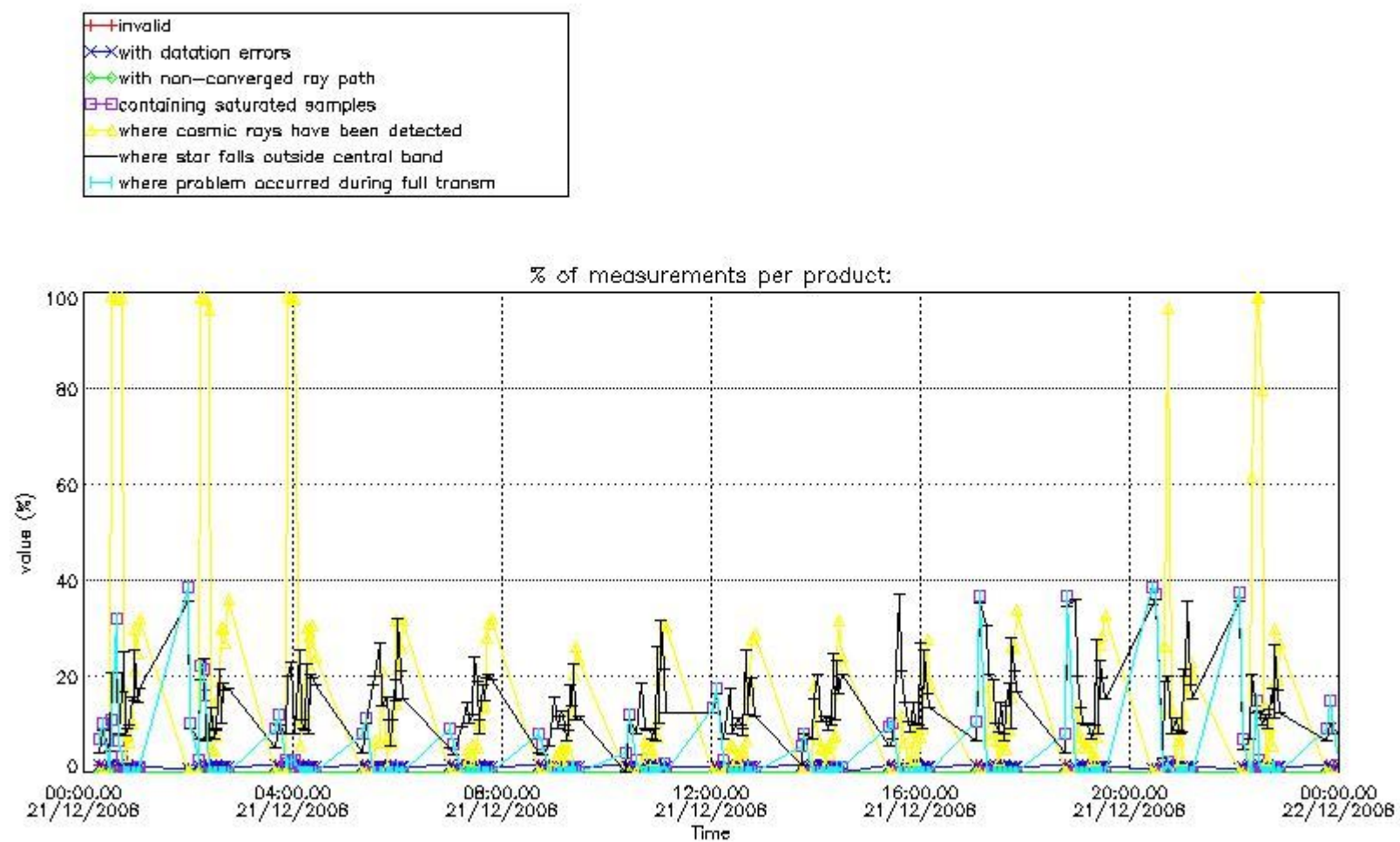


4. Level 1 quality information per product

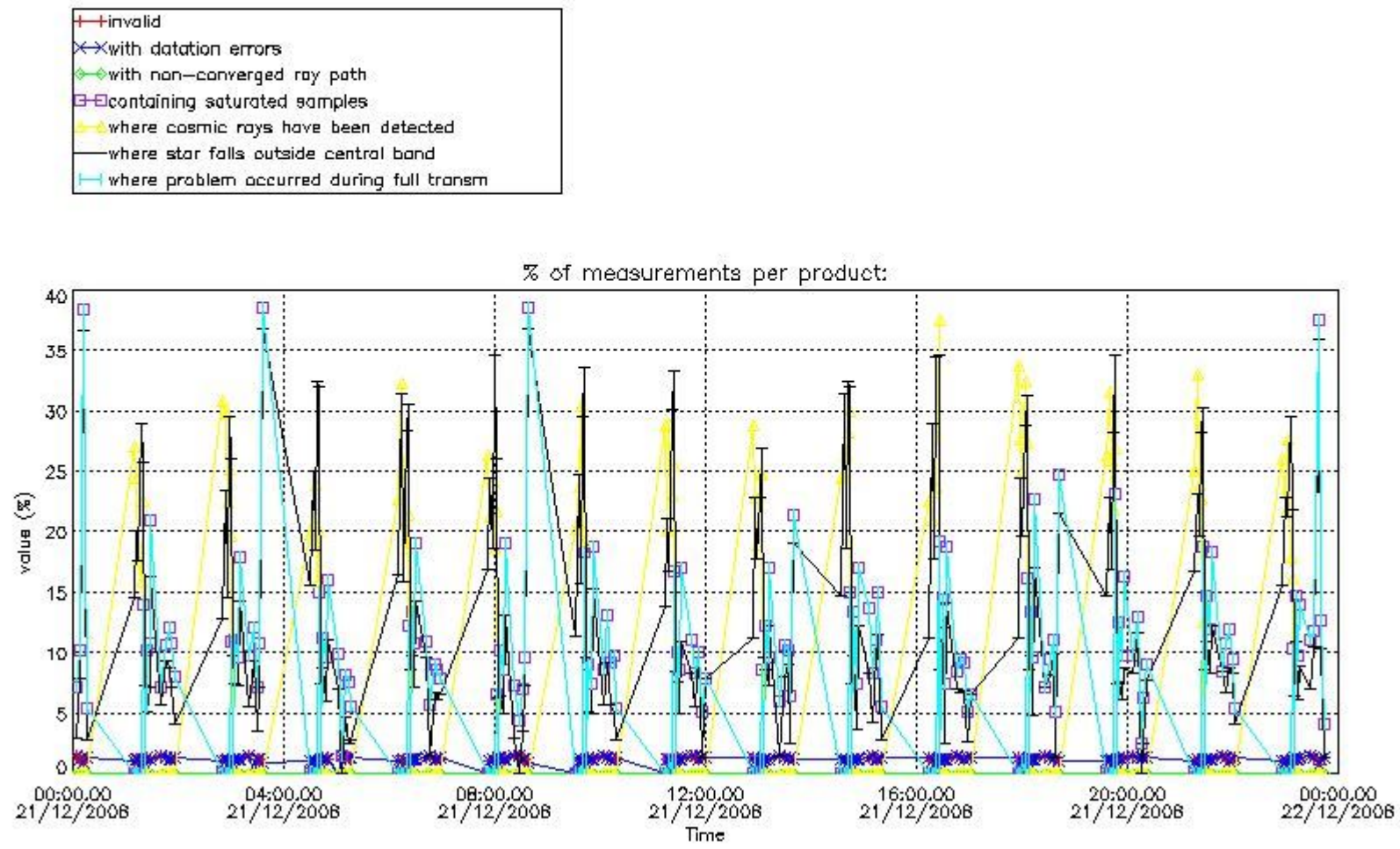
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



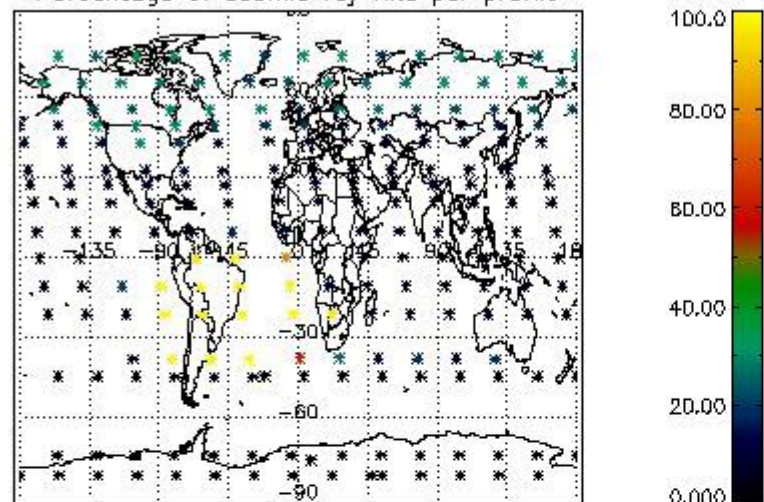
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



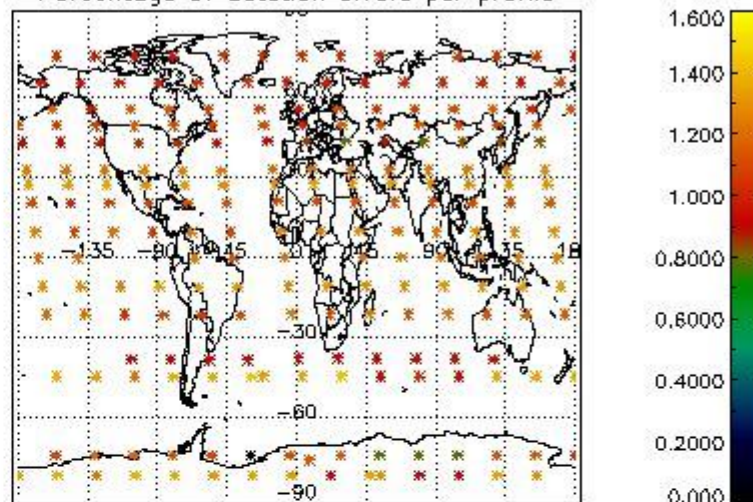
4.2 Plot quality information per product coming from level 1b processing (world map)

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

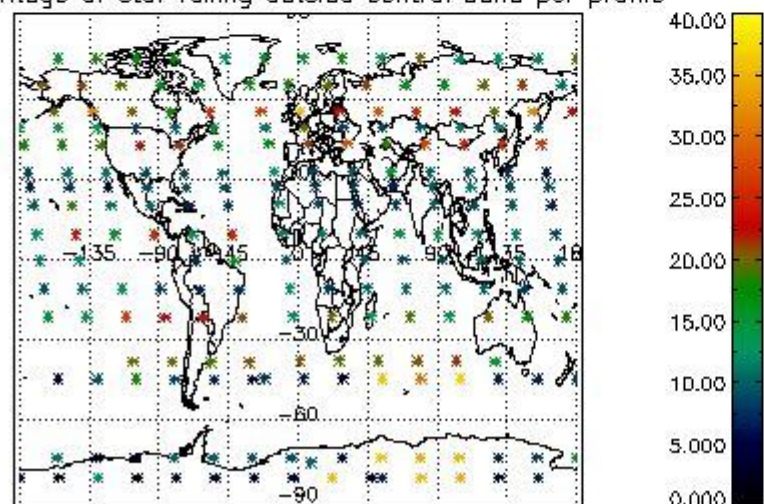
Percentage of cosmic ray hits per profile



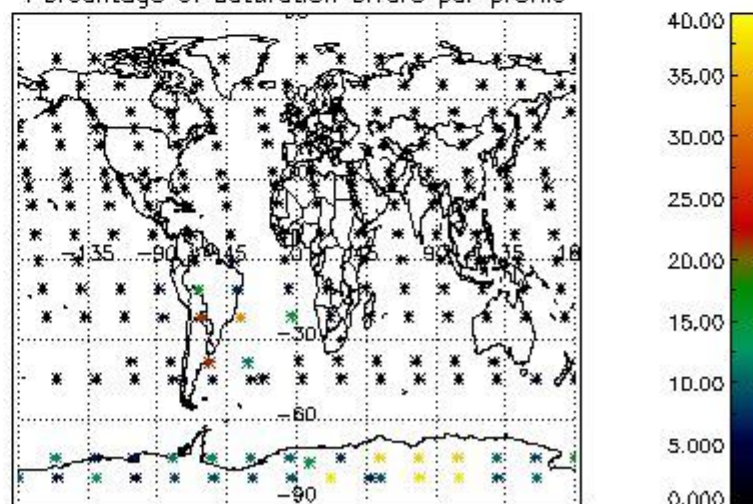
Percentage of datation errors per profile



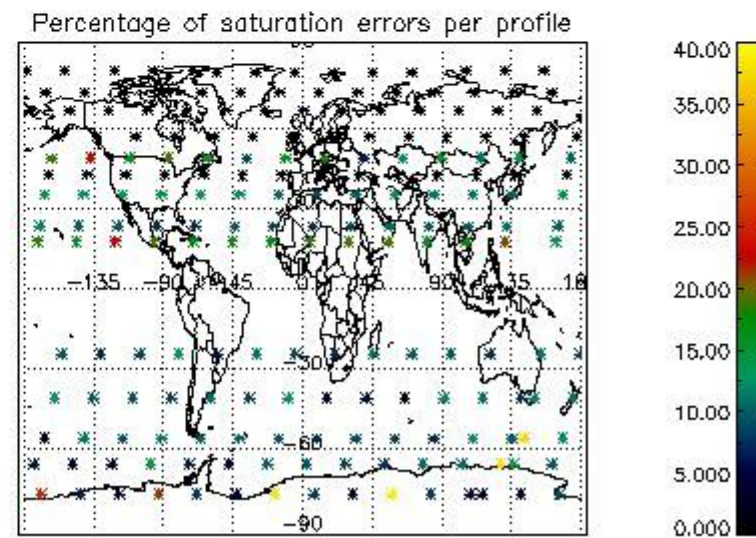
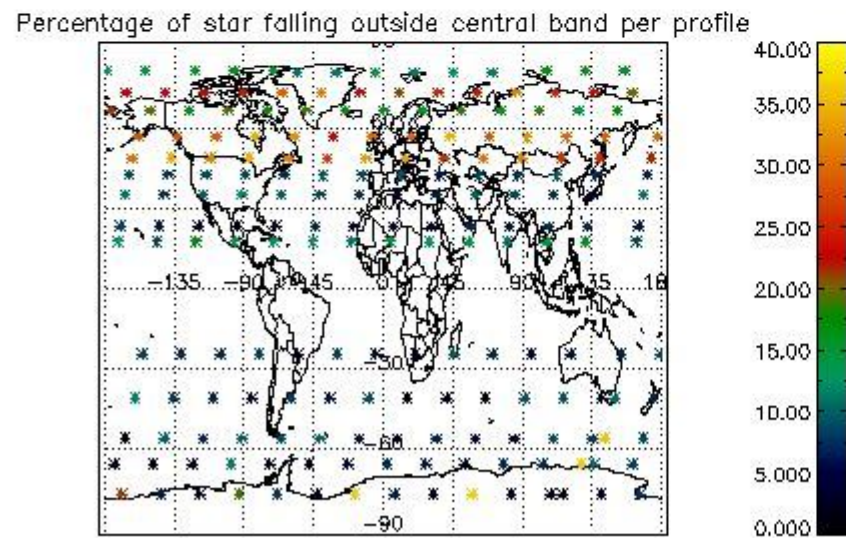
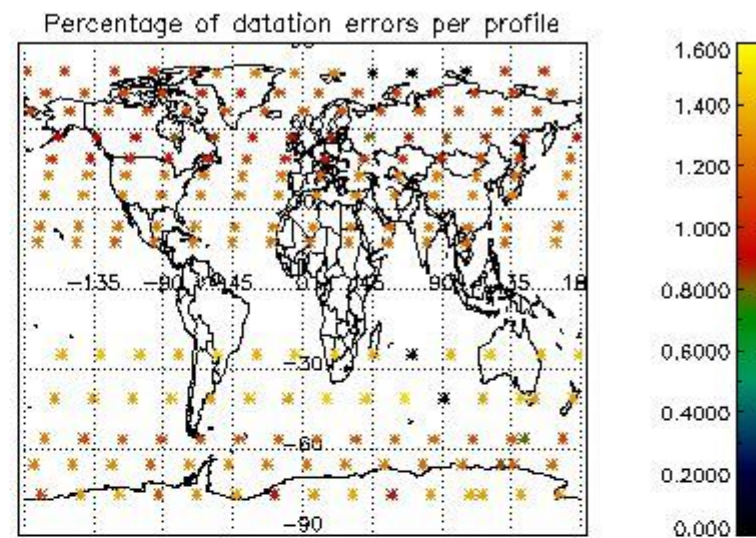
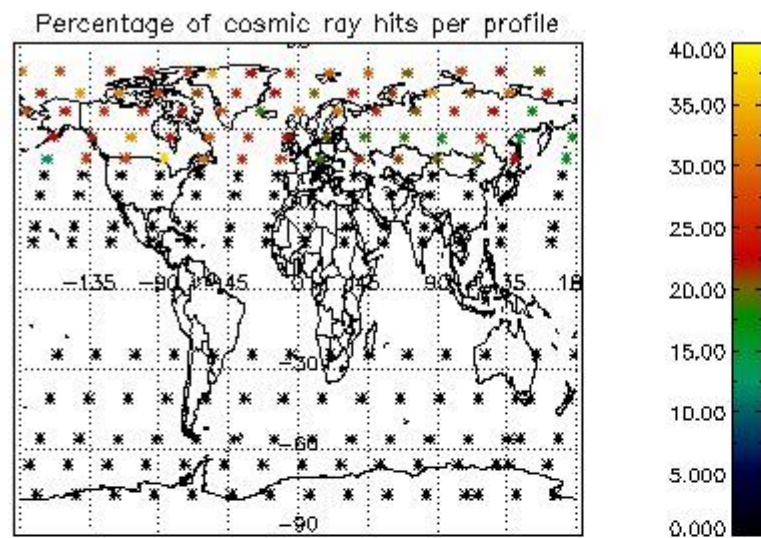
Percentage of star falling outside central band per profile



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

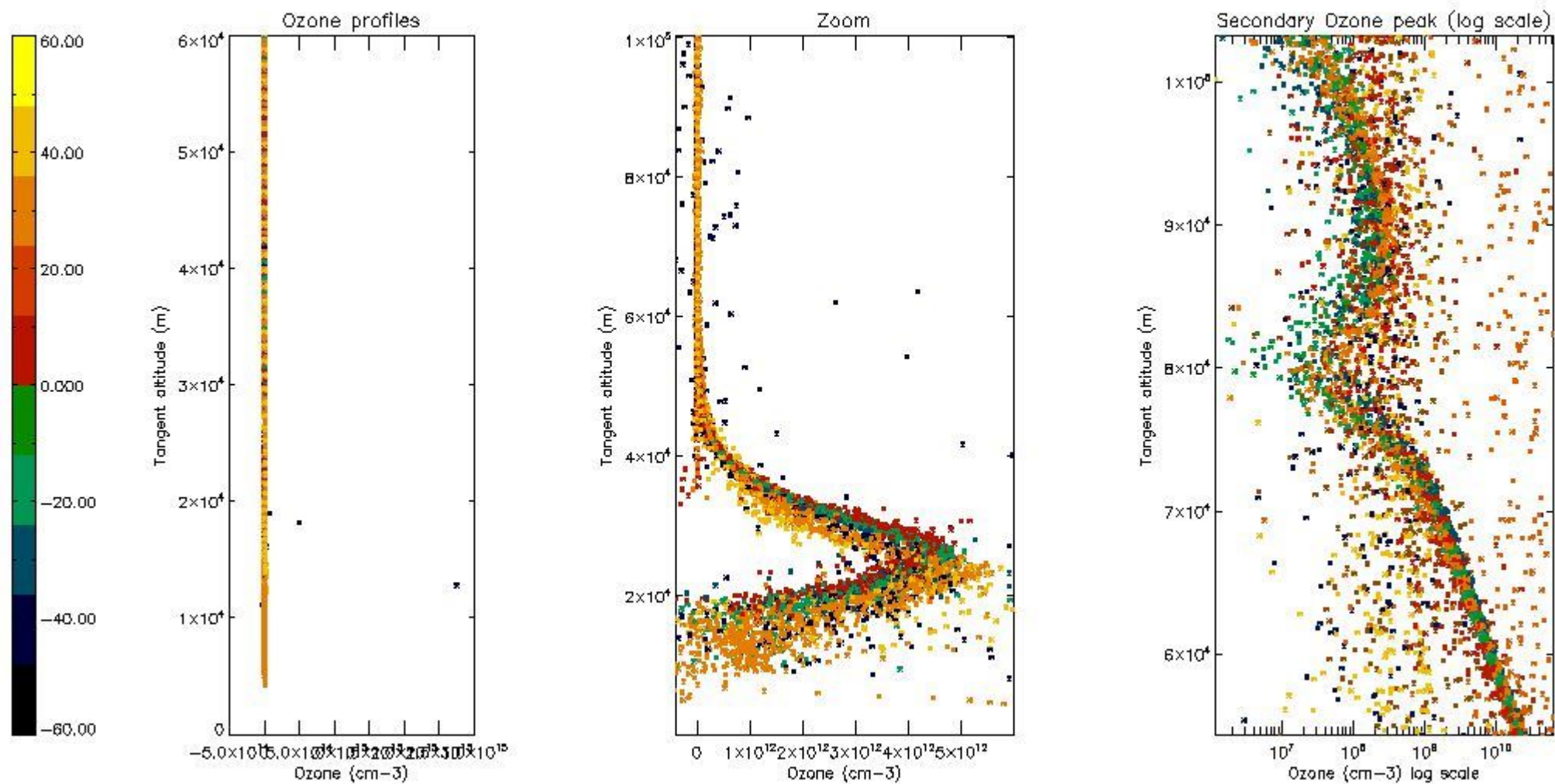
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	16

STD < 10	12
STD < 5	7

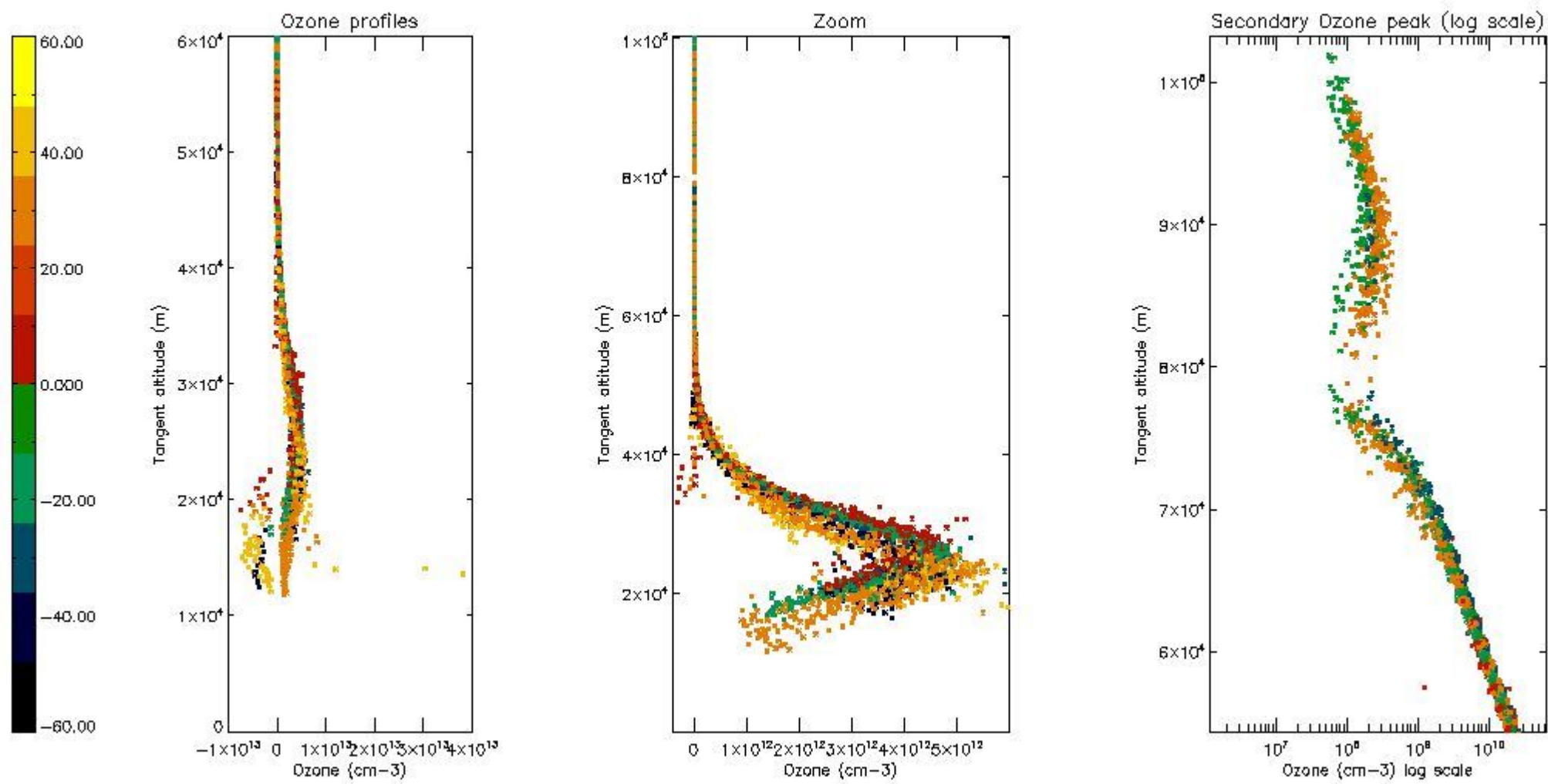
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



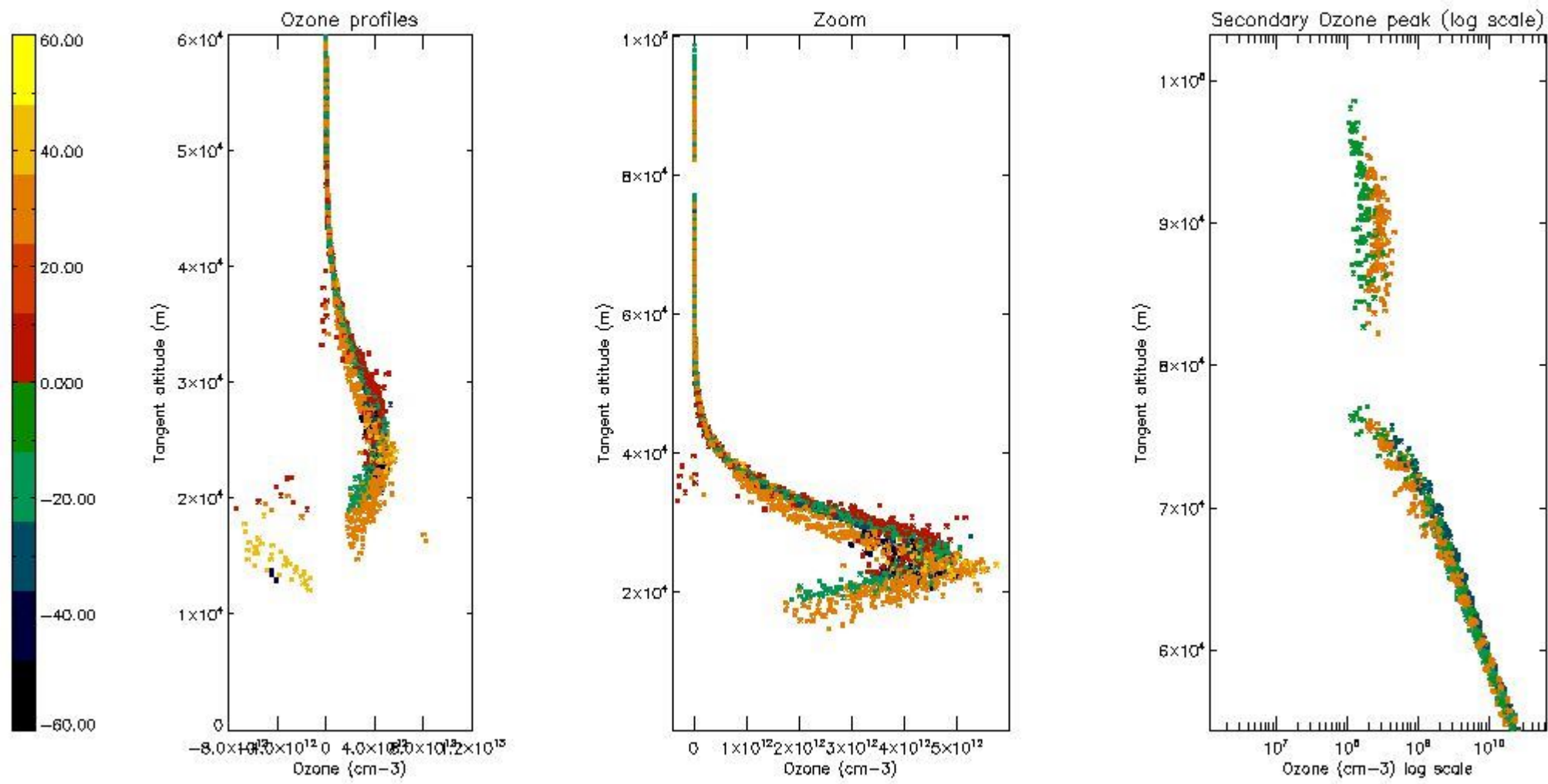
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



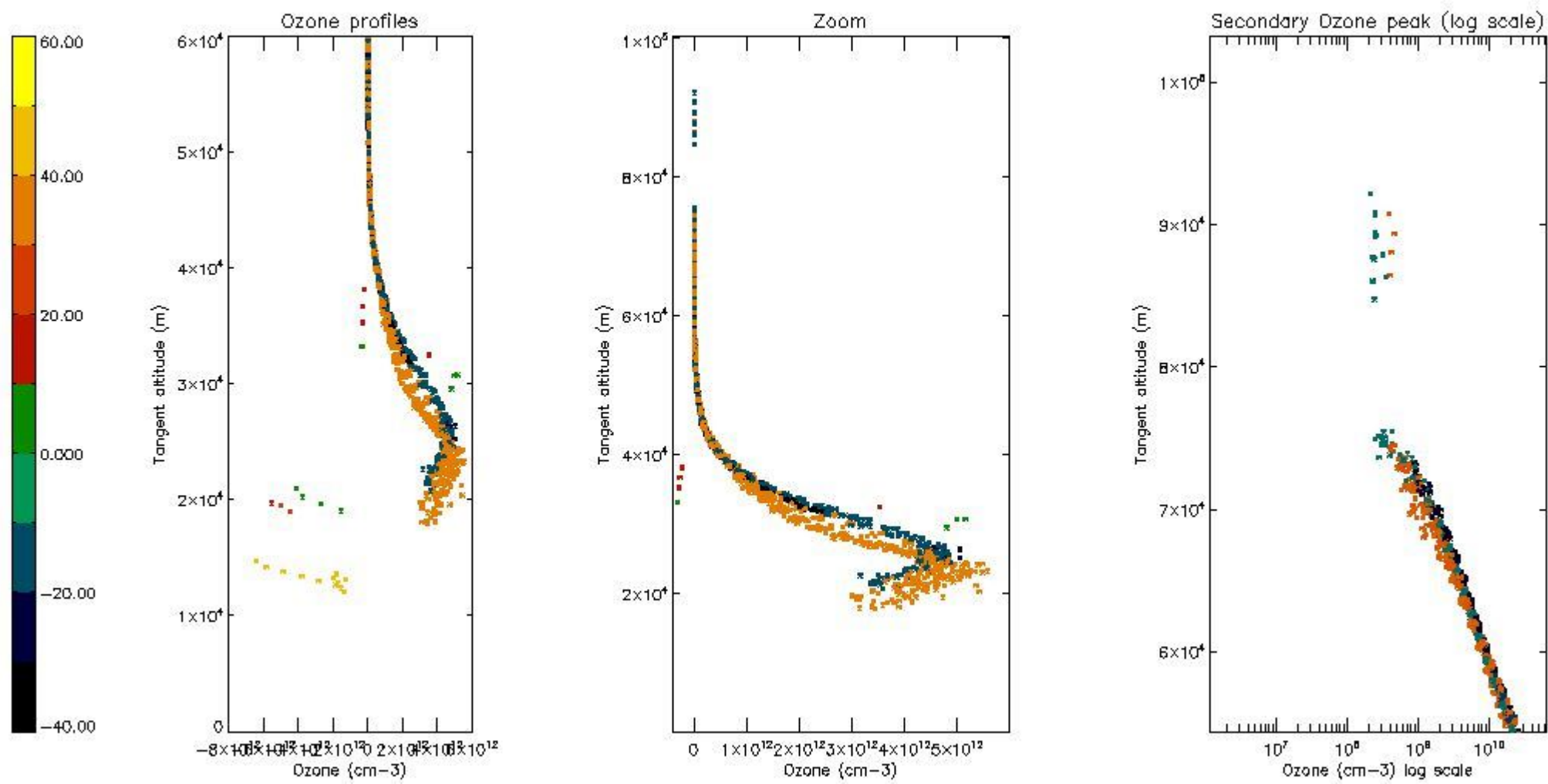
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



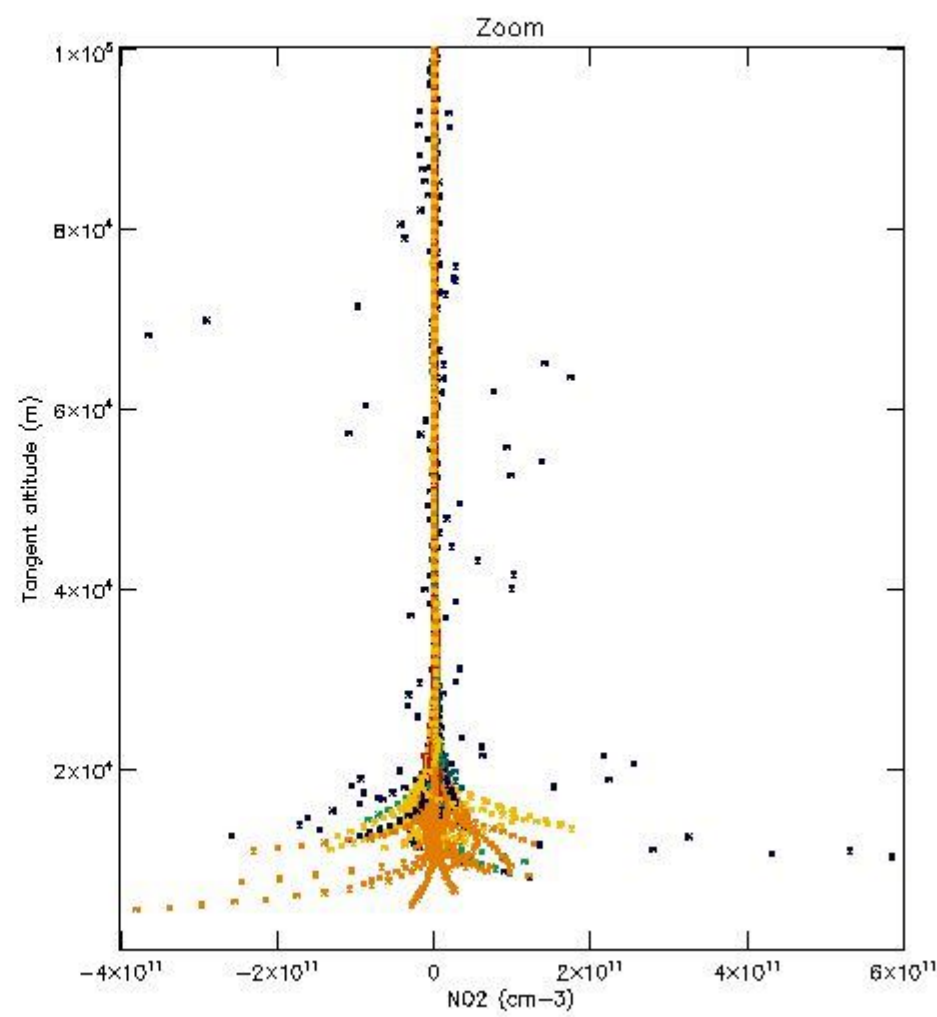
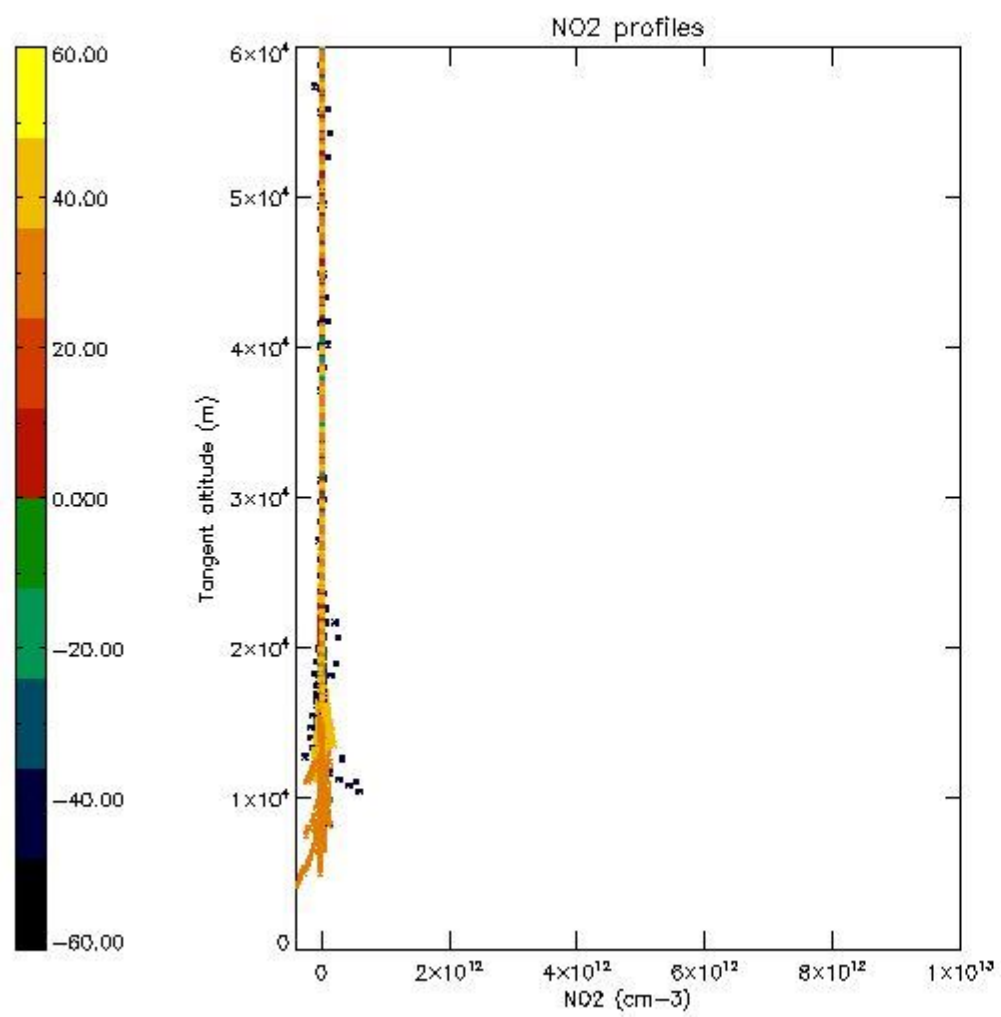
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



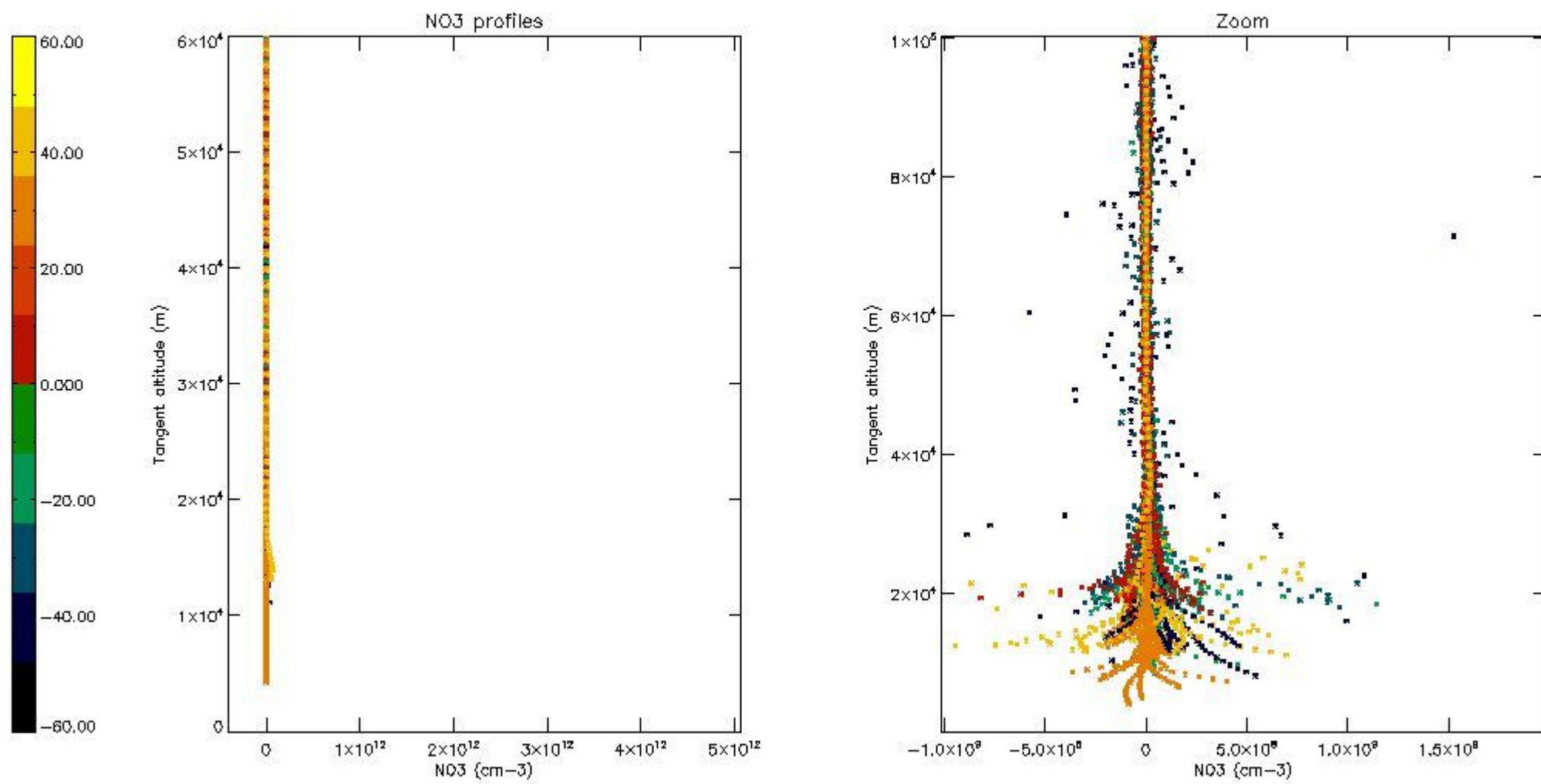
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



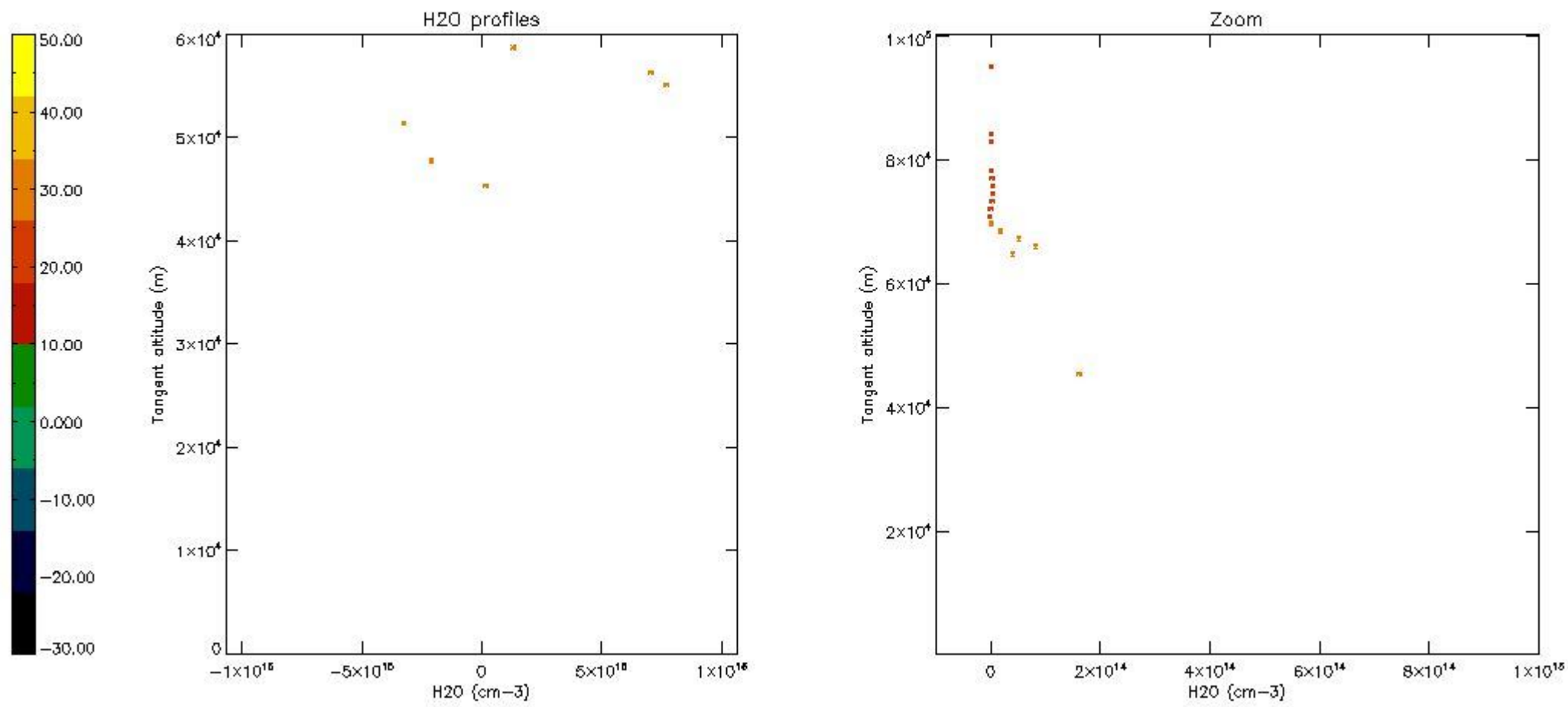
5.7 Plot NO3 profiles for all STD (dark without errors)

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	21-DEC-2008 00:04:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-DEC-2008 00:04:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-DEC-2008 00:04:25

GOMOS Level 2 Daily Report

SUMMARY

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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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[5.6 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](#)

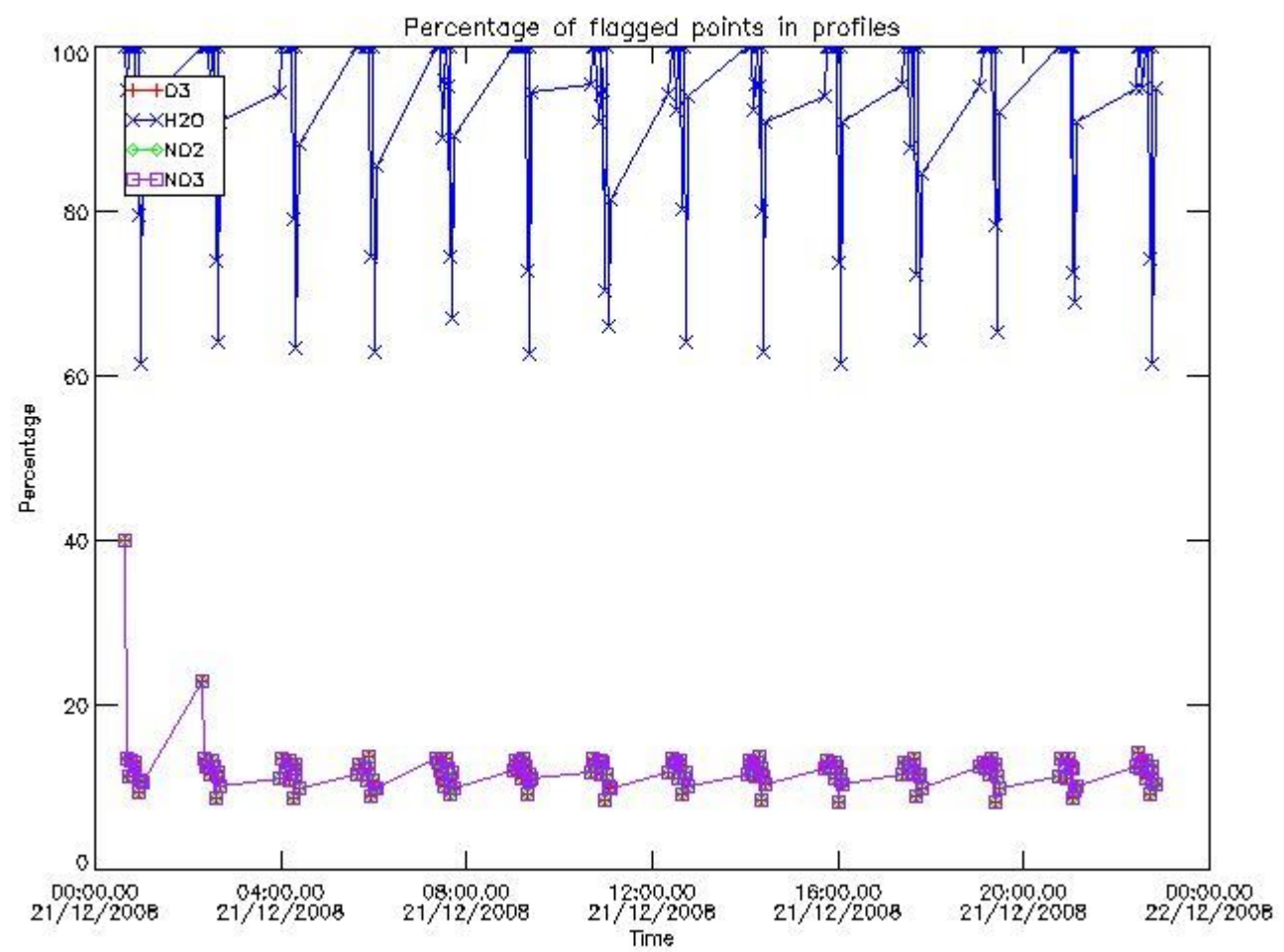
[6. Auxiliary Data Files used for the production reported in section 2](#)

397	GOM_NL__2PRFIN20081221_223846_000000392074_00488_35612_1343.N1	21-DEC-2008 22:38:46	Dark	38.500	159	Ups Car	2.9200	7200.0	77	35612	No
398	GOM_NL__2PRFIN20081221_224017_000000432074_00488_35612_1344.N1	21-DEC-2008 22:40:17	Dark	42.500	71	lot Car	2.2460	7700.0	85	35612	No
399	GOM_NL__2PRFIN20081221_224317_000000552074_00488_35612_1345.N1	21-DEC-2008 22:43:17	Dark	55.000	65	Lam Vel	2.2040	4400.0	110	35612	No
400	GOM_NL__2PRFIN20081221_224502_000000452074_00488_35612_1346.N1	21-DEC-2008 22:45:02	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	35612	No
401	GOM_NL__2PRFIN20081221_224642_000000472074_00488_35612_1347.N1	21-DEC-2008 22:46:42	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	35612	No
402	GOM_NL__2PRFIN20081221_224940_000000502074_00488_35612_1348.N1	21-DEC-2008 22:49:40	Dark	49.500	117	Pi Pup	2.7060	3800.0	99	35612	No
403	GOM_NL__2PRFIN20081221_225243_000000482074_00488_35612_1349.N1	21-DEC-2008 22:52:43	Straylight	48.000	23	21Eps CMa	1.5020	26000.	96	35612	No
404	GOM_NL__2PRFIN20081221_225656_000000482074_00488_35612_1350.N1	21-DEC-2008 22:56:56	Straylight	48.000	47	2Bet CMa	1.9760	28000.	96	35612	No
405	GOM_NL__2PRFIN20081221_230021_000000462074_00488_35612_1351.N1	21-DEC-2008 23:00:21	Straylight	46.000	7	19Bet Ori	0.10000	14000.	92	35612	No
406	GOM_NL__2PRFIN20081221_230225_000000472074_00488_35612_1352.N1	21-DEC-2008 23:02:25	Straylight	47.000	30	46Eps Ori	1.6940	30000.	94	35612	No
407	GOM_NL__2PRFIN20081221_230517_000000562074_00488_35612_1353.N1	21-DEC-2008 23:05:17	Tw_i_and_stray	56.000	14	58Alp Ori	0.87000	3000.0	112	35612	No
408	GOM_NL__2PRFIN20081221_230734_000000442074_00488_35612_1354.N1	21-DEC-2008 23:07:34	Tw_i_and_stray	43.500	13	87Alp Tau	0.86700	3800.0	87	35612	No
409	GOM_NL__2PRFIN20081221_230921_000000402074_00488_35612_1355.N1	21-DEC-2008 23:09:21	Bright	39.500	176	23Zet Tau	3.0200	22000.	79	35612	No
410	GOM_NL__2PRFIN20081221_231126_000000412074_00488_35612_1356.N1	21-DEC-2008 23:11:26	Bright	41.000	28	12Bet Tau	1.6500	15200.	82	35612	No
411	GOM_NL__2PRFIN20081221_231443_000000412074_00488_35612_1357.N1	21-DEC-2008 23:14:43	Bright	41.000	107	37The Aur	2.6490	11000.	82	35612	No
412	GOM_NL__2PRFIN20081221_231621_000000402074_00488_35612_1358.N1	21-DEC-2008 23:16:21	Bright	39.500	6	13Alp Aur	0.080000	3400.0	79	35612	No
413	GOM_NL__2PRFIN20081221_232808_000000362074_00488_35612_1359.N1	21-DEC-2008 23:28:08	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	35612	No
414	GOM_NL__2PRFIN20081221_233247_000000382074_00488_35612_1360.N1	21-DEC-2008 23:32:47	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	35612	No
415	GOM_NL__2PRFIN20081221_233706_000000642074_00488_35612_1361.N1	21-DEC-2008 23:37:06	Bright	64.000	32	77Eps UMa	1.7630	11000.	128	35612	No
416	GOM_NL__2PRFIN20081221_233956_000000442074_00488_35612_1362.N1	21-DEC-2008 23:39:56	Bright	43.500	39	85Eta UMa	1.8540	24000.	87	35612	No
417	GOM_NL__2PRFIN20081221_234331_000000382074_00488_35612_1363.N1	21-DEC-2008 23:43:31	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	35612	No
418	GOM_NL__2PRFIN20081221_234653_000000392074_00488_35612_1364.N1	21-DEC-2008 23:46:53	Bright	38.500	83		2.3780	11000.	77	35612	No
419	GOM_NL__2PRFIN20081221_234945_000000442074_00488_35612_1365.N1	21-DEC-2008 23:49:45	Bright	44.000	3	16Alp Boo	-0.050000	4250.0	88	35612	No
420	GOM_NL__2PRFIN20081221_235910_000000382074_00488_35612_1366.N1	21-DEC-2008 23:59:10	Bright	37.500	122	9Alp2Lib	2.7470	9700.0	75	35612	No

3. Quality information per product

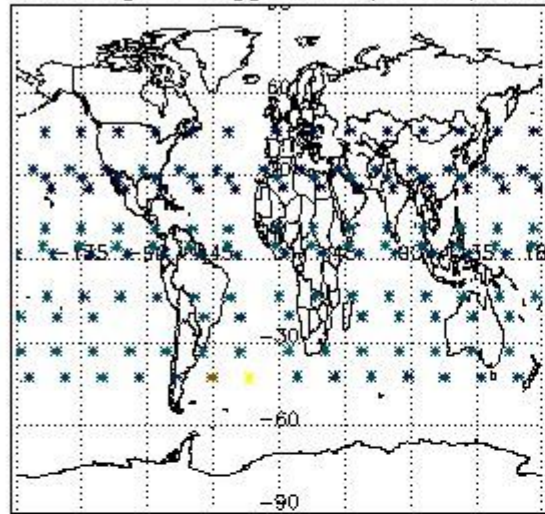
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

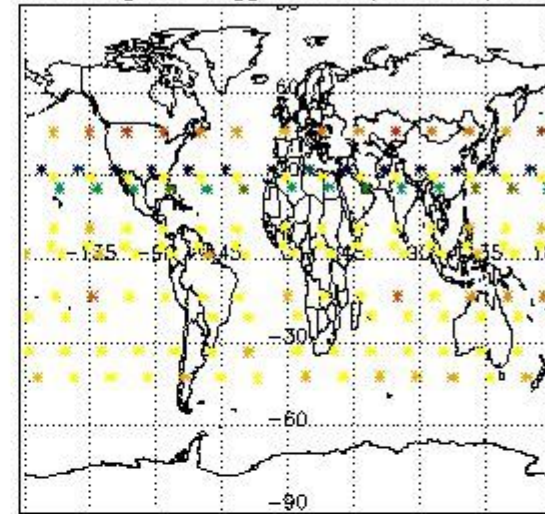


3.2 Plot quality information per product (world map)

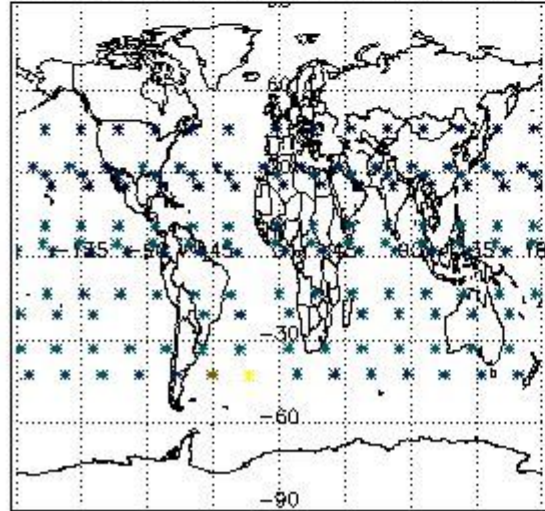
Percentage of flagged data per O3 profile



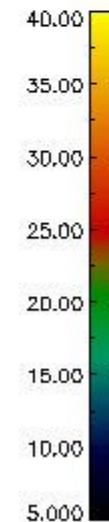
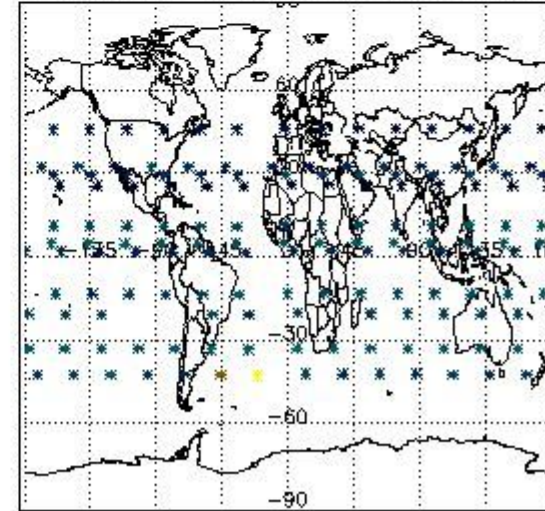
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

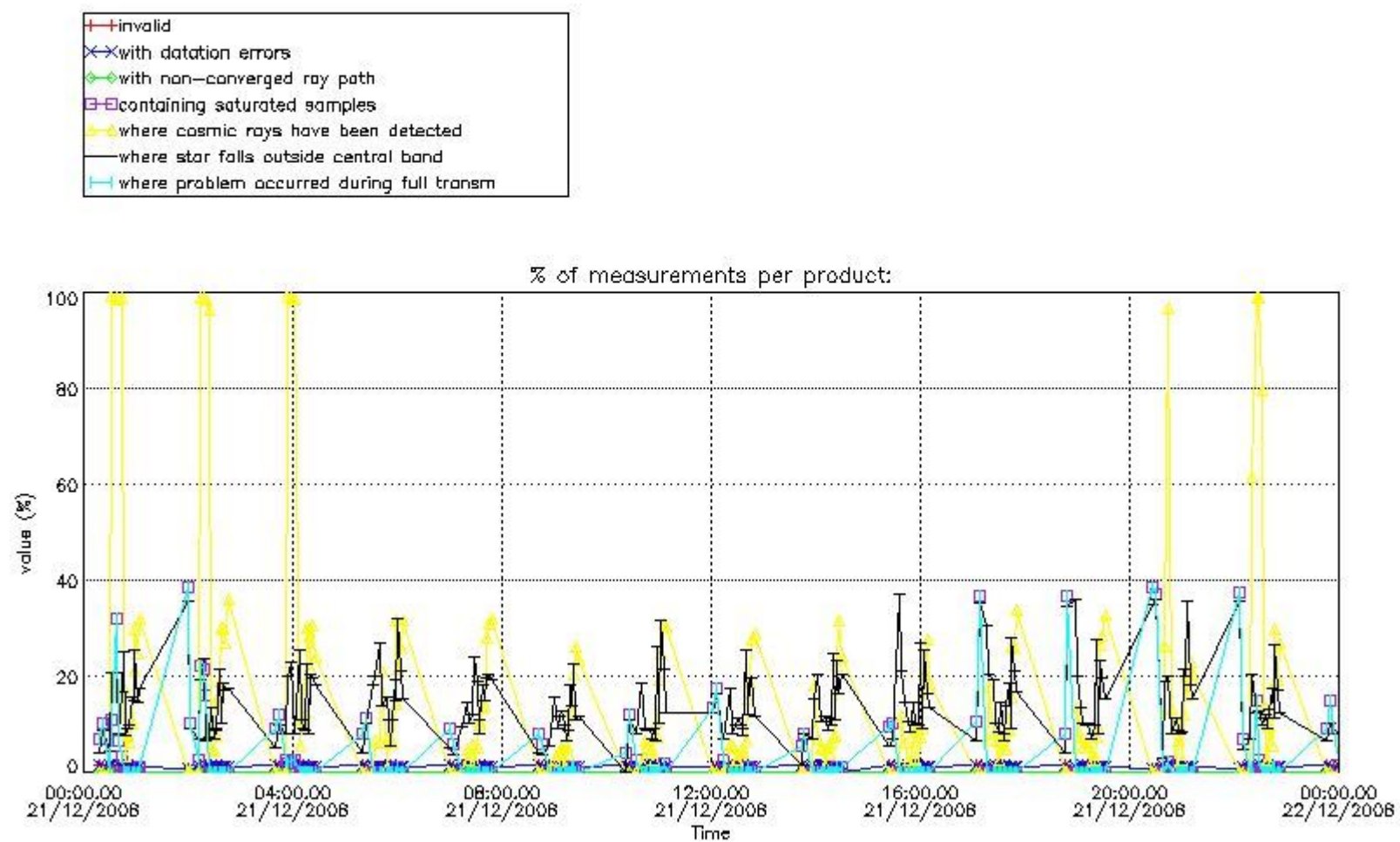


4. Level 1 quality information per product

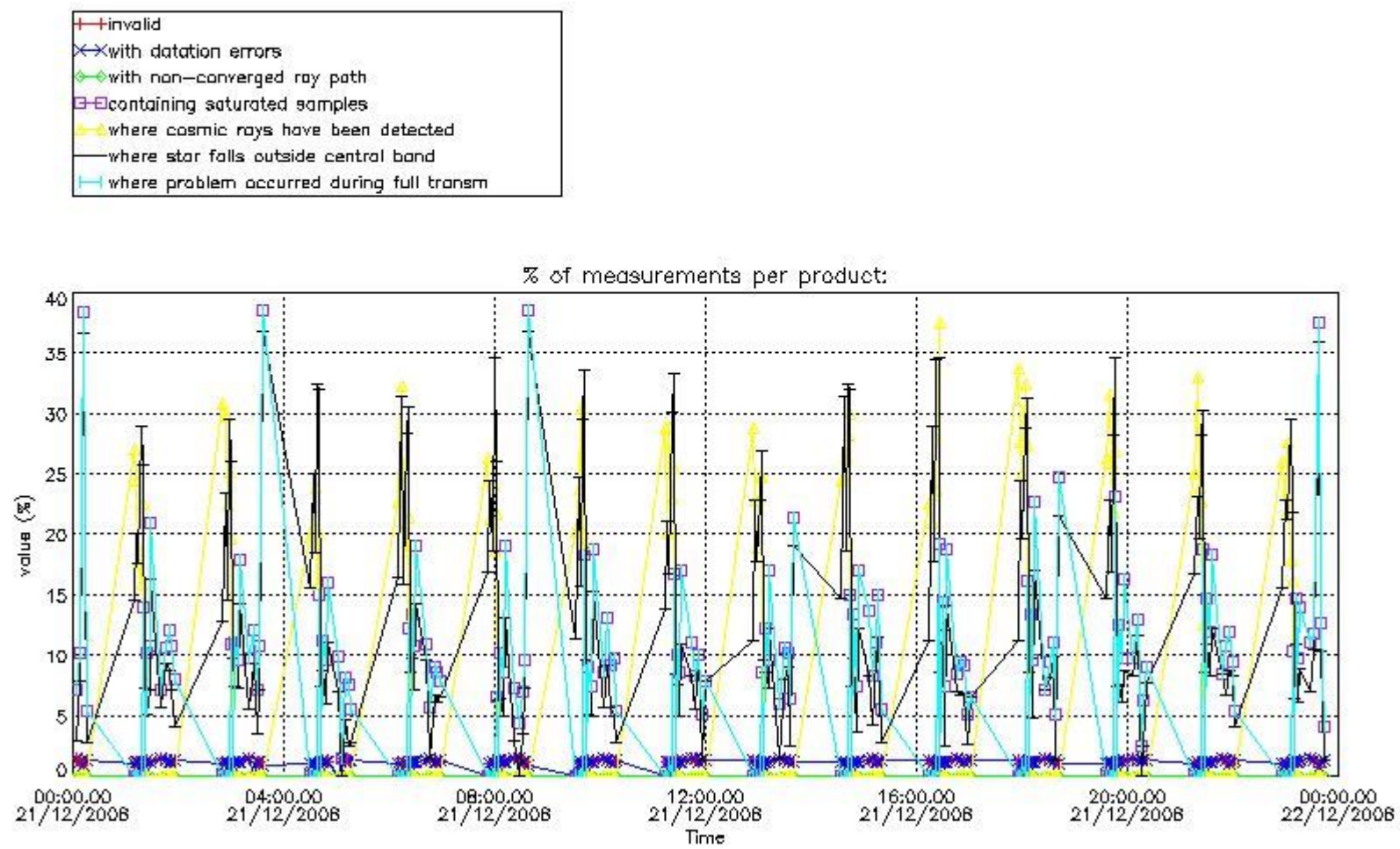
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



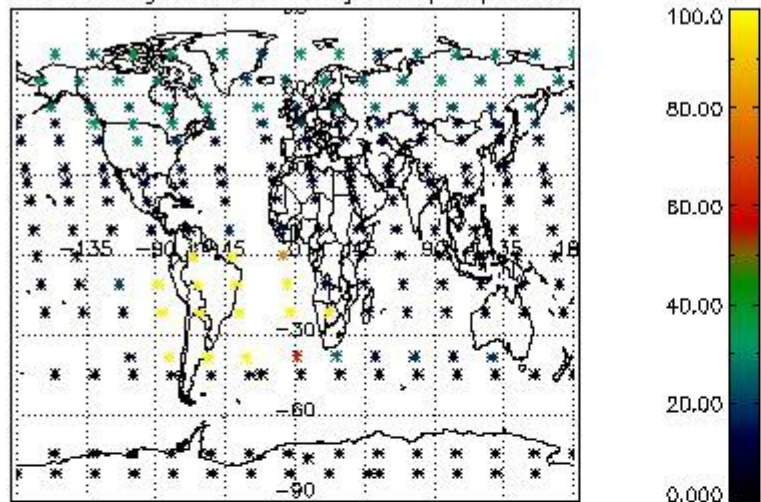
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



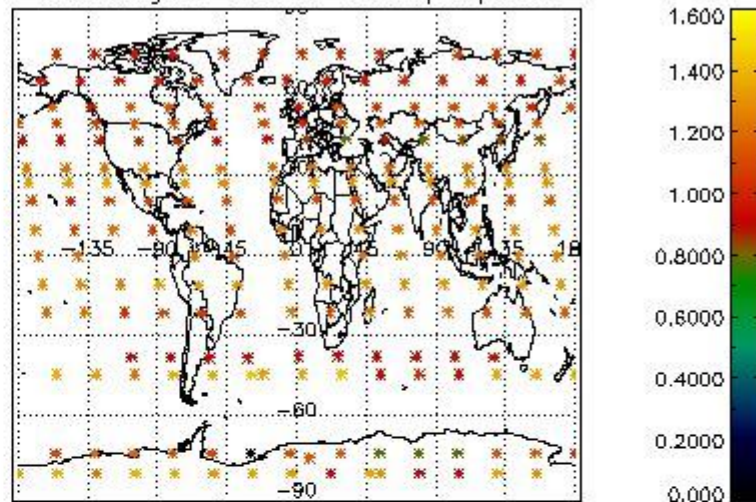
4.2 Plot quality information per product coming from level 1b processing (world map)

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

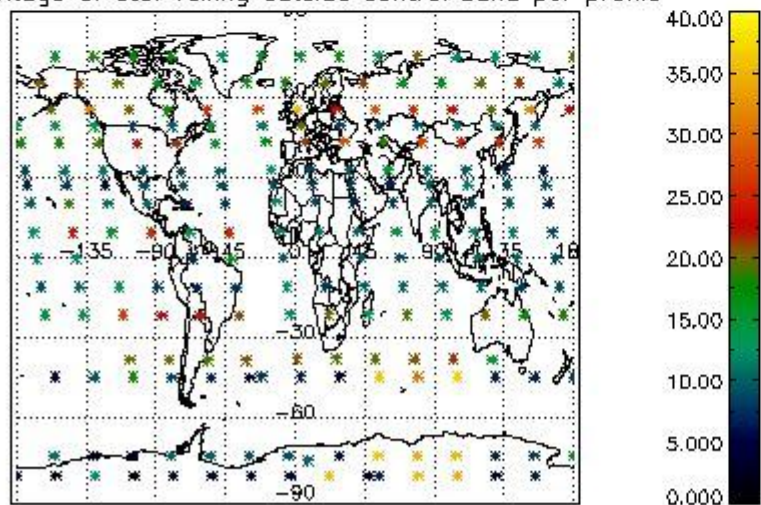
Percentage of cosmic ray hits per profile



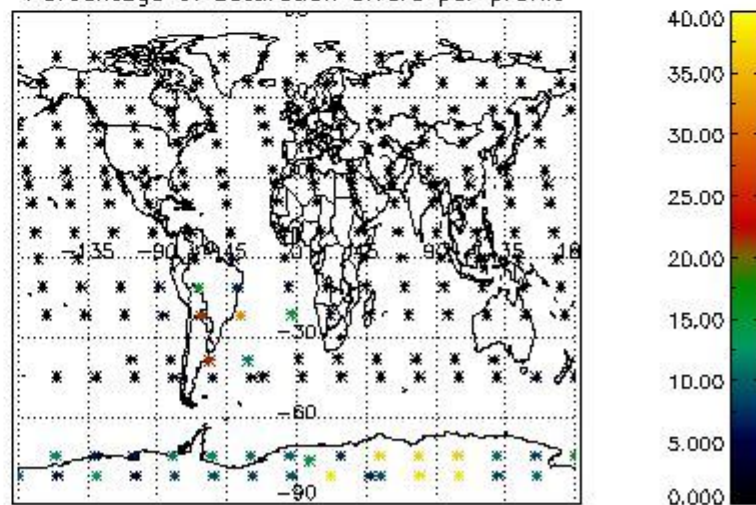
Percentage of datation errors per profile



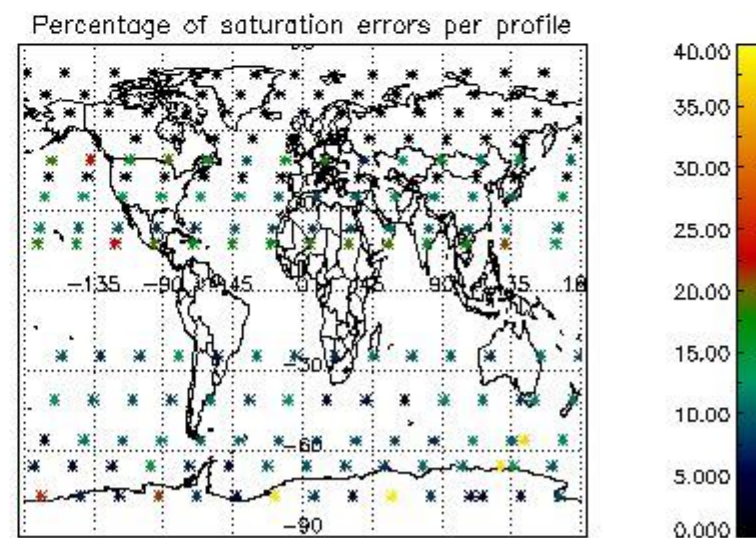
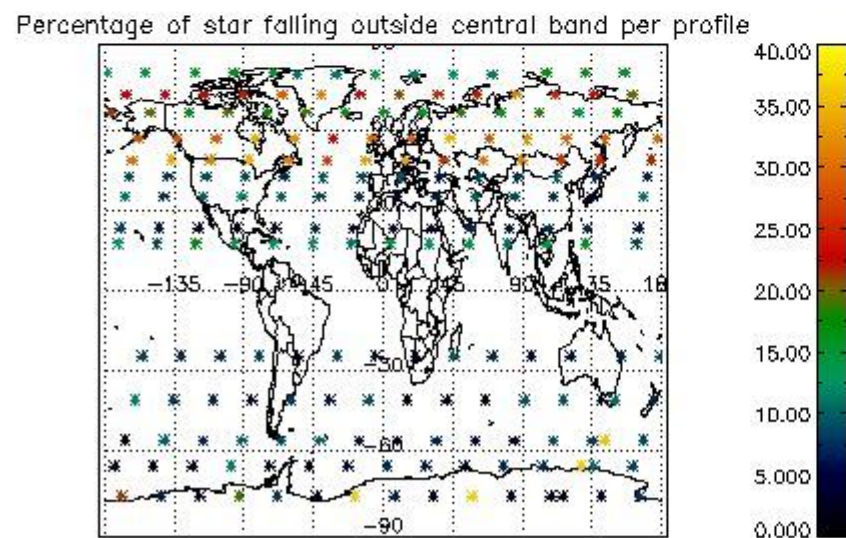
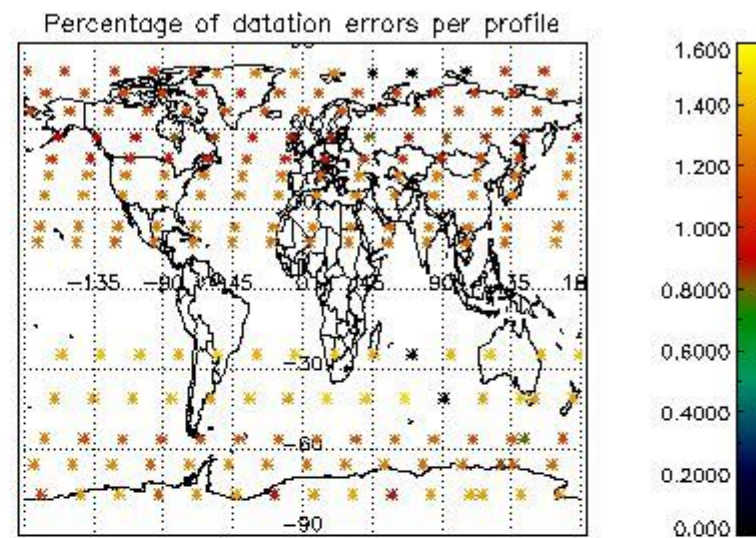
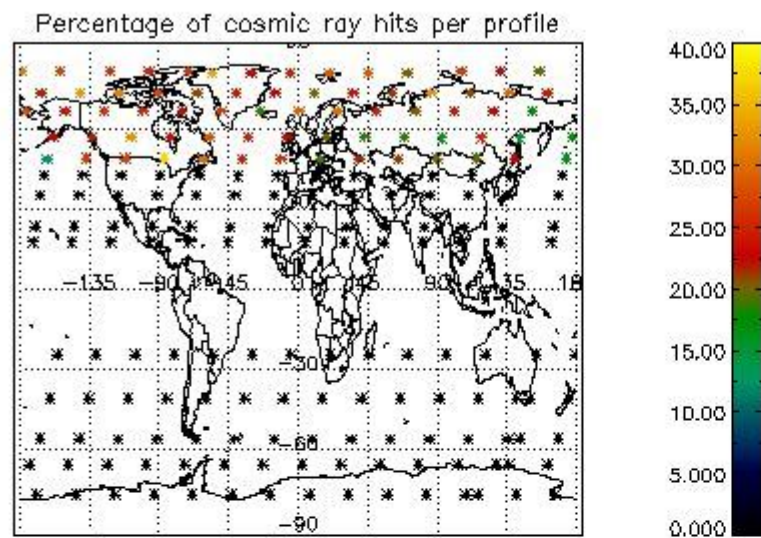
Percentage of star falling outside central band per profile



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

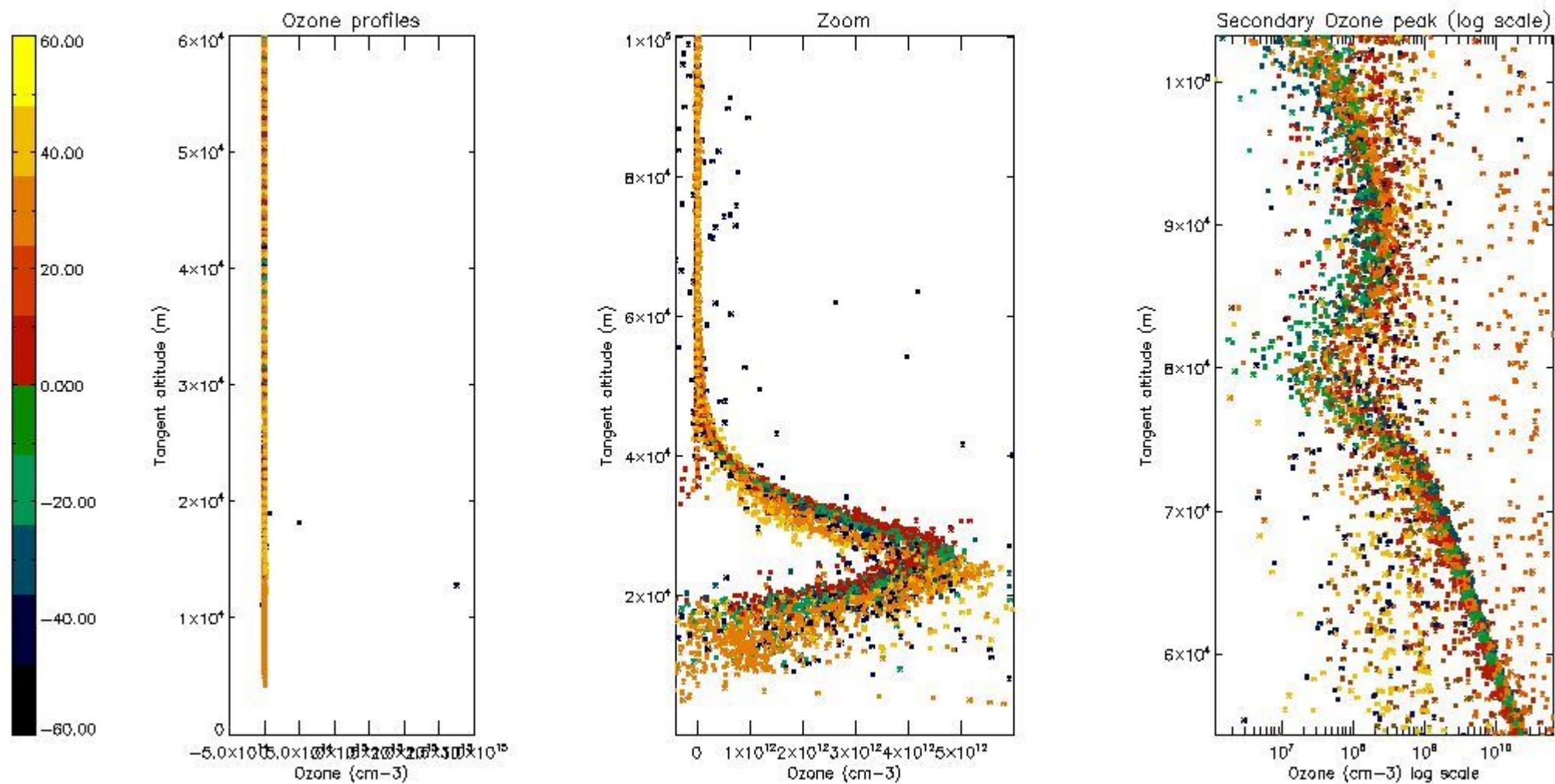
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	16

STD < 10	12
STD < 5	7

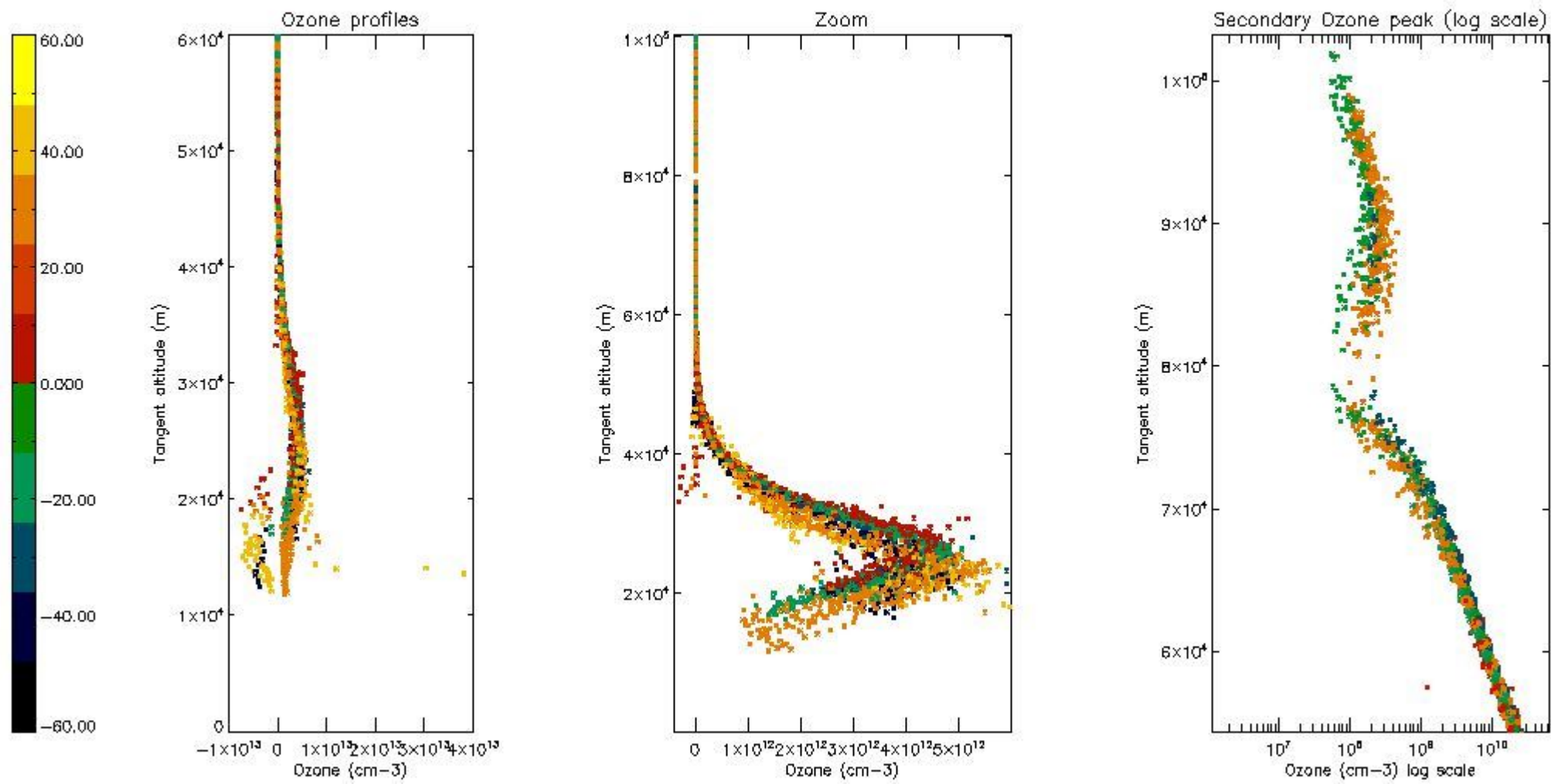
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



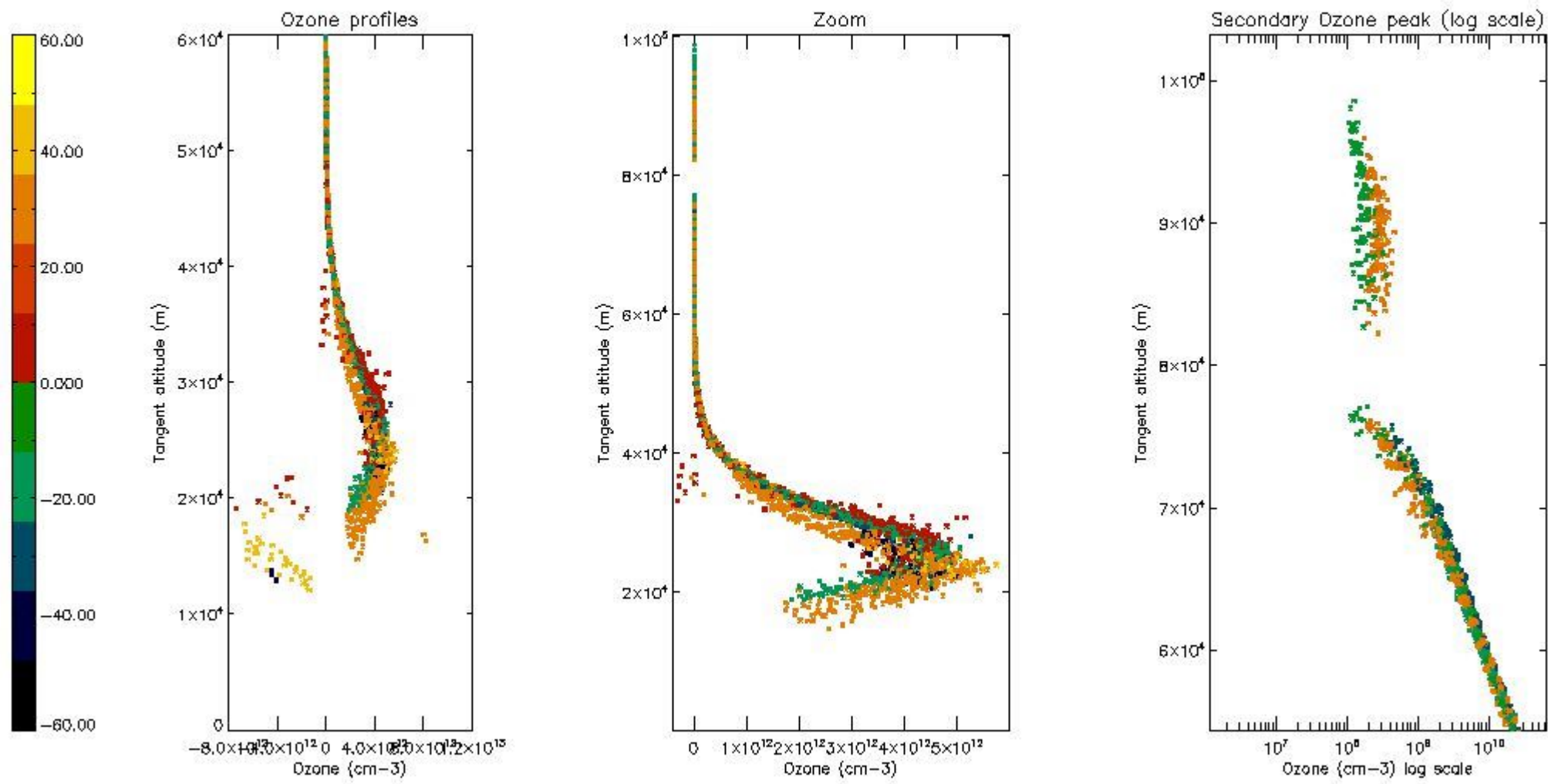
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



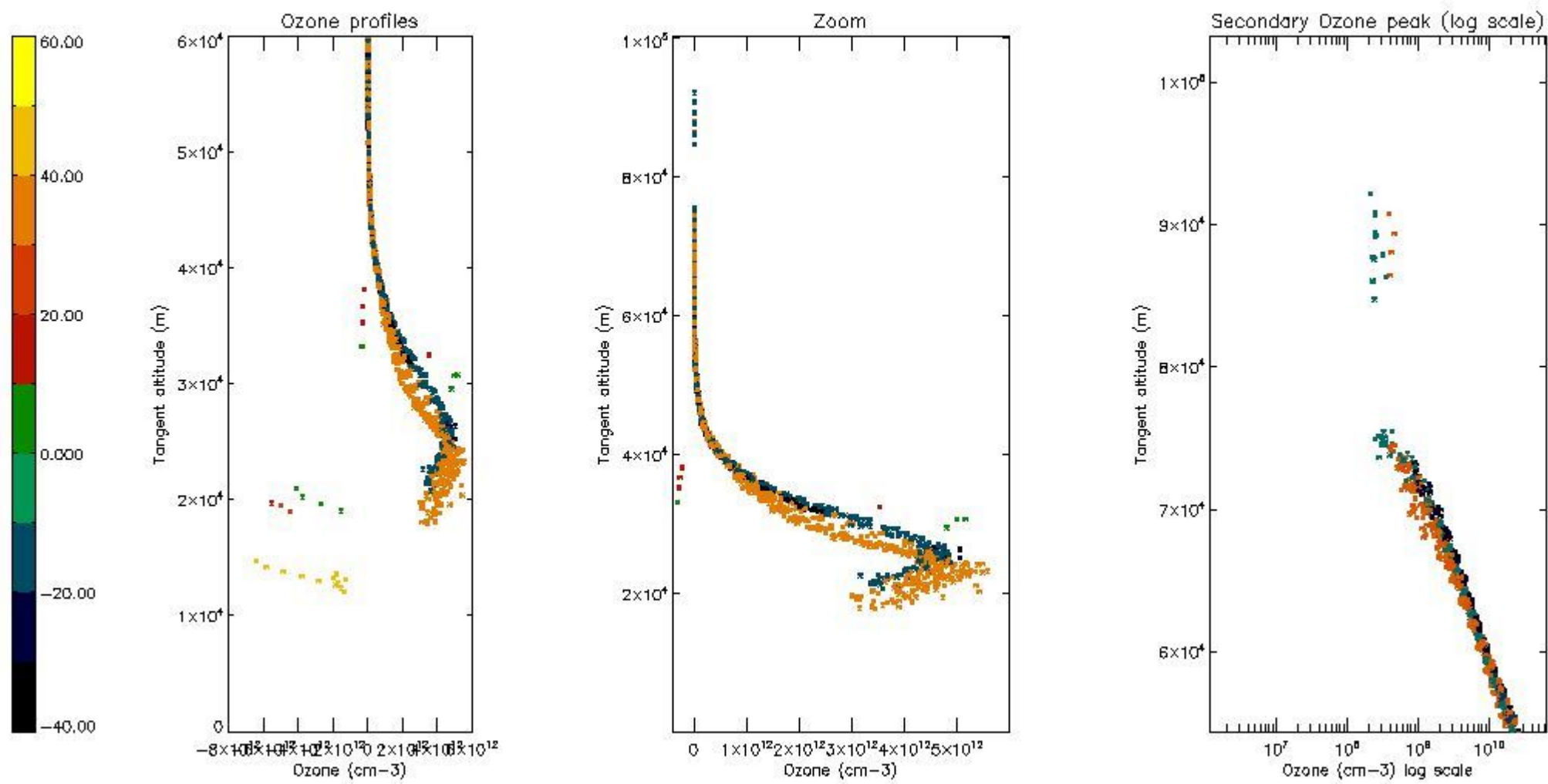
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



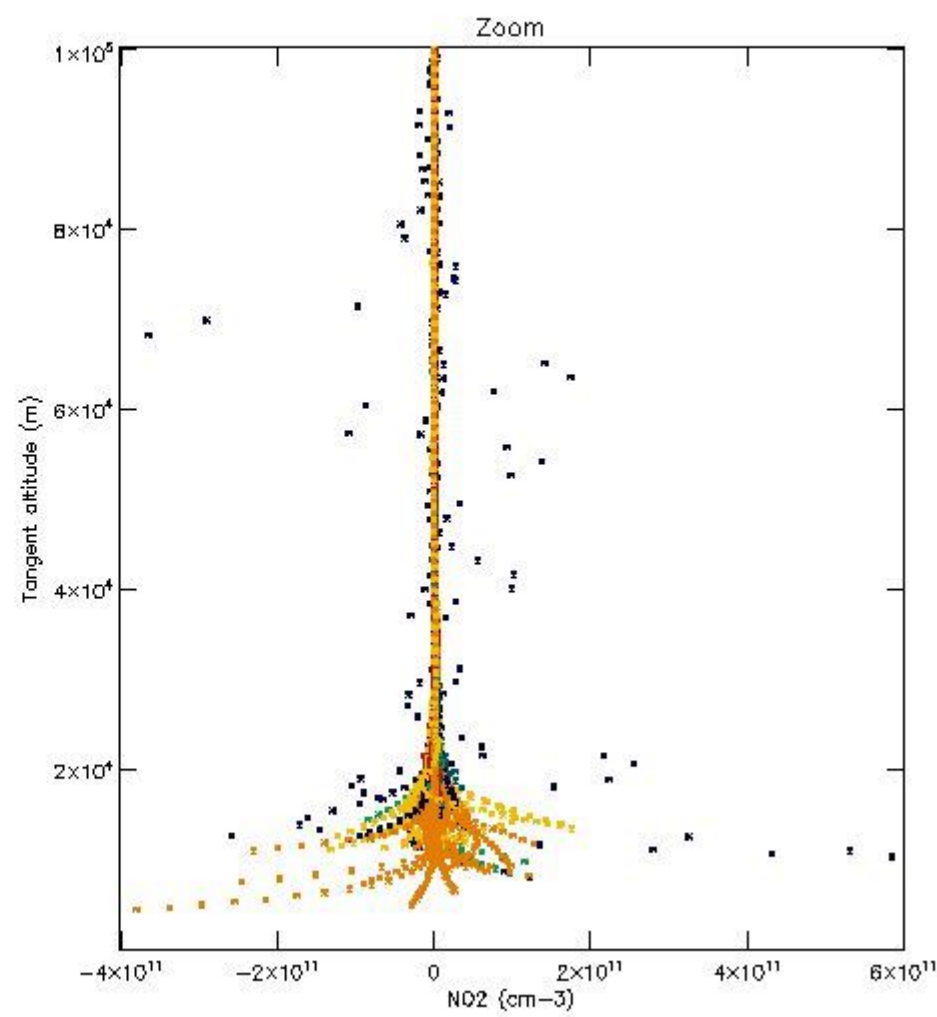
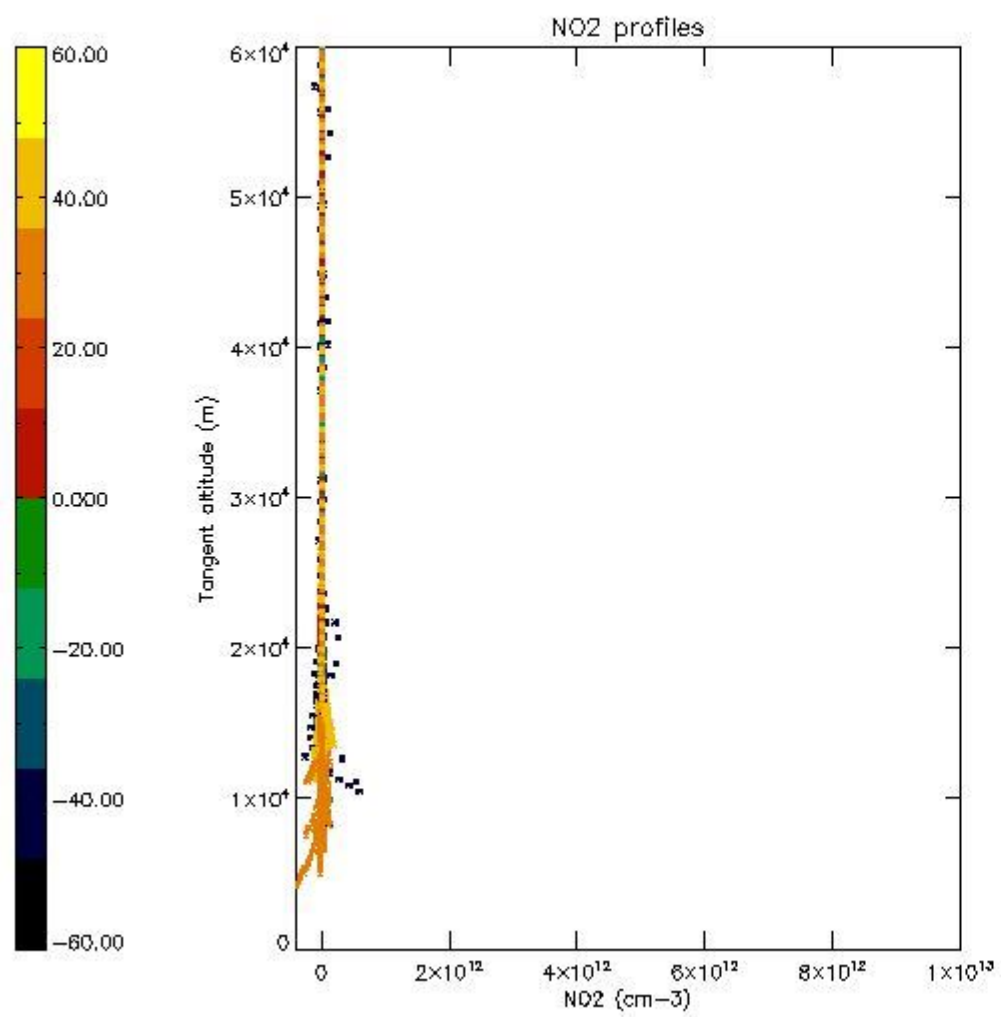
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



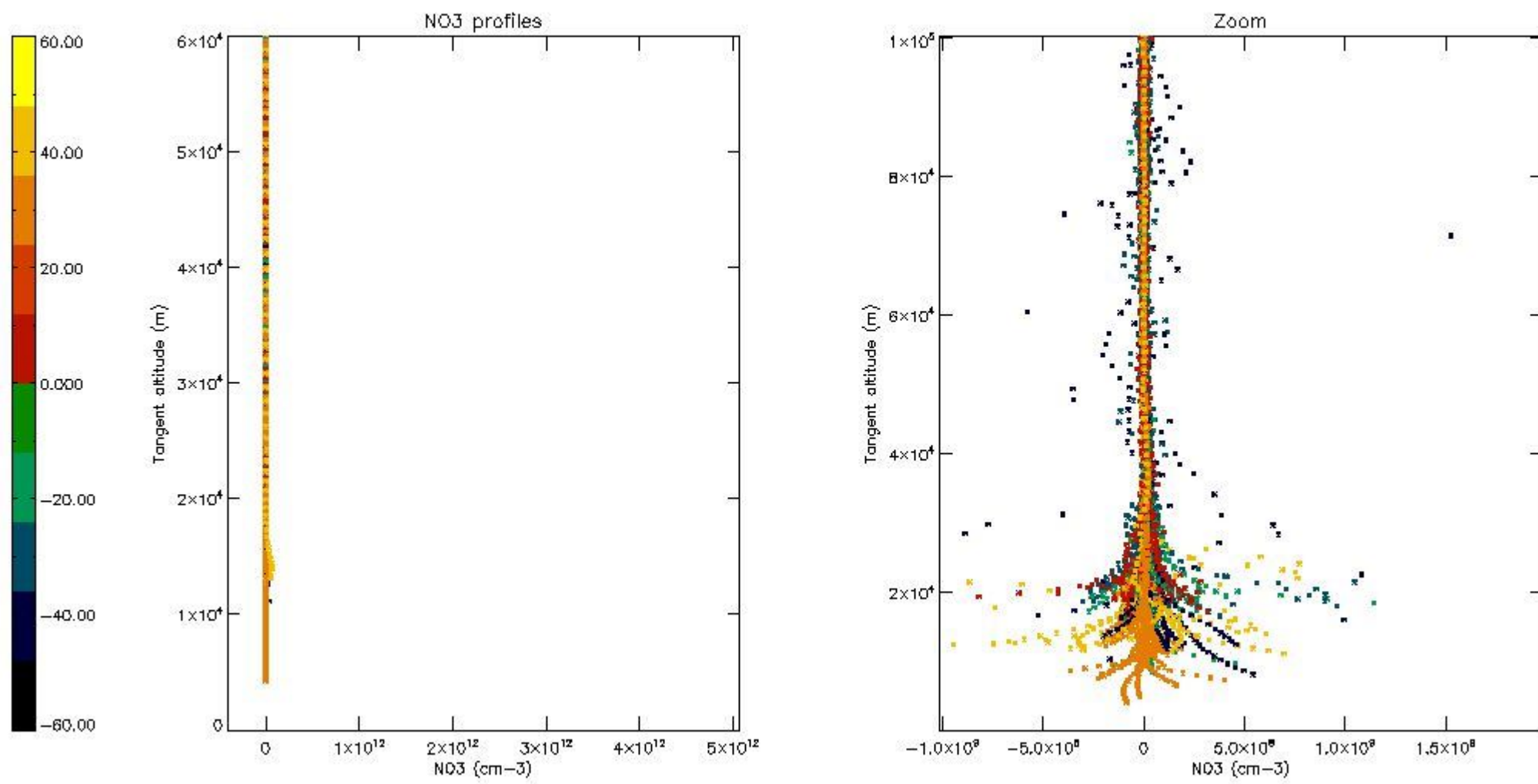
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



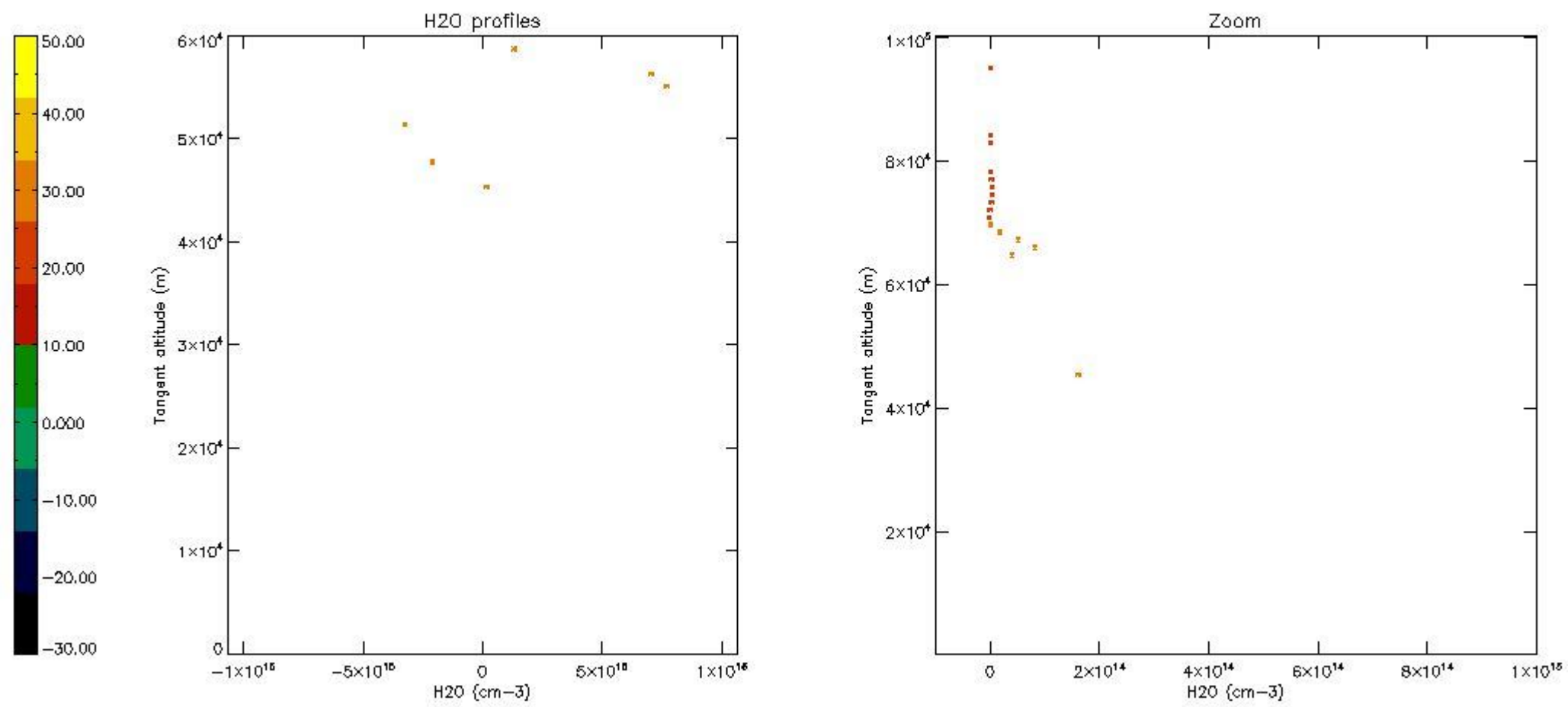
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

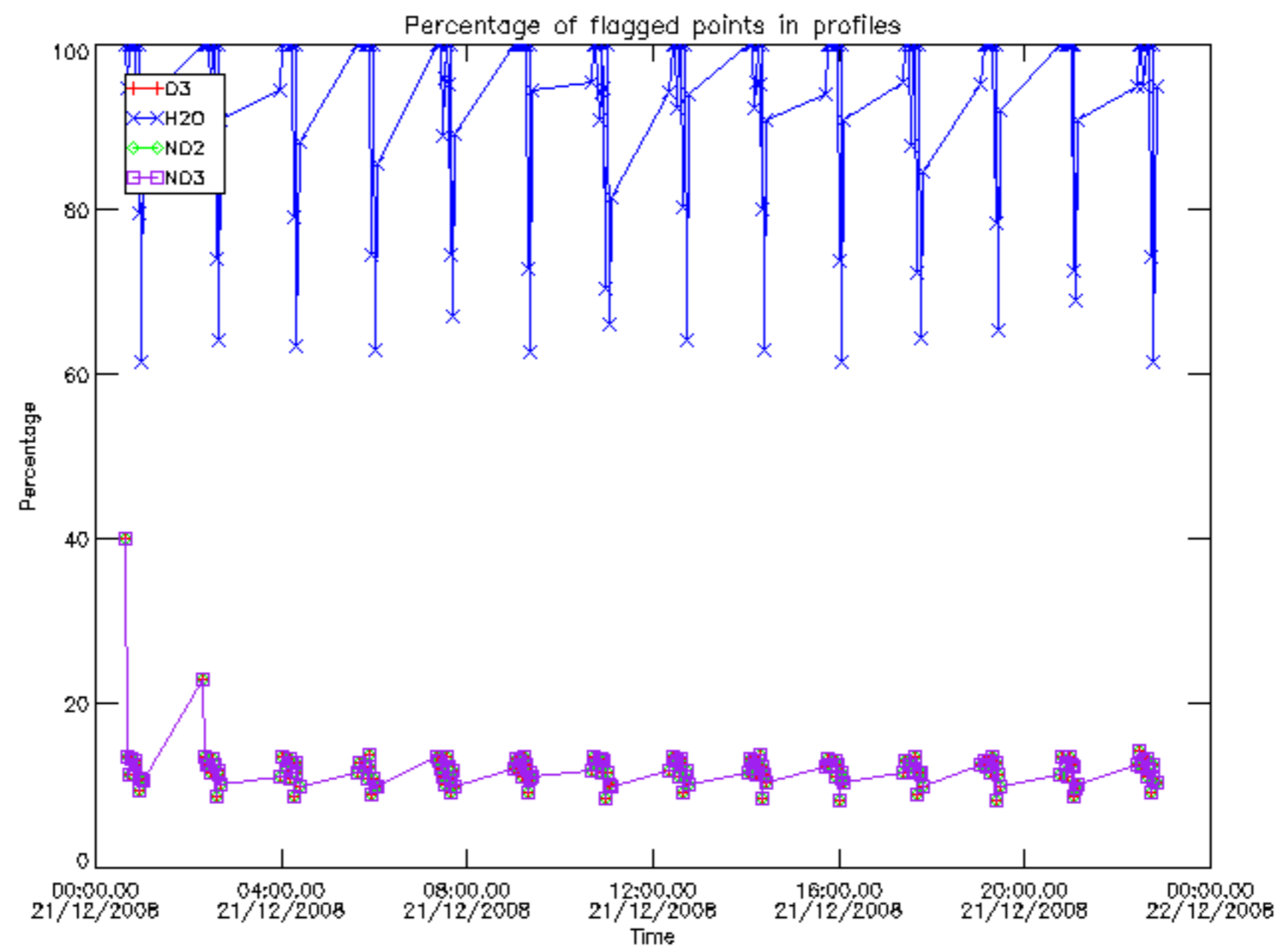
The colorbar represents the latitude.



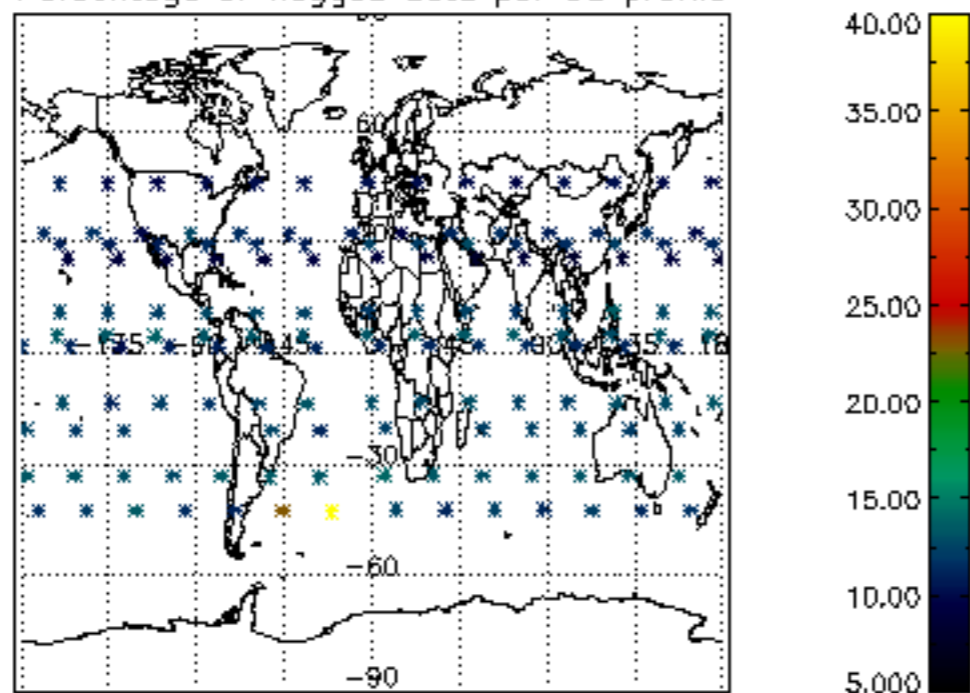
6. Auxiliary Data Files used for the production reported in section 2

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.

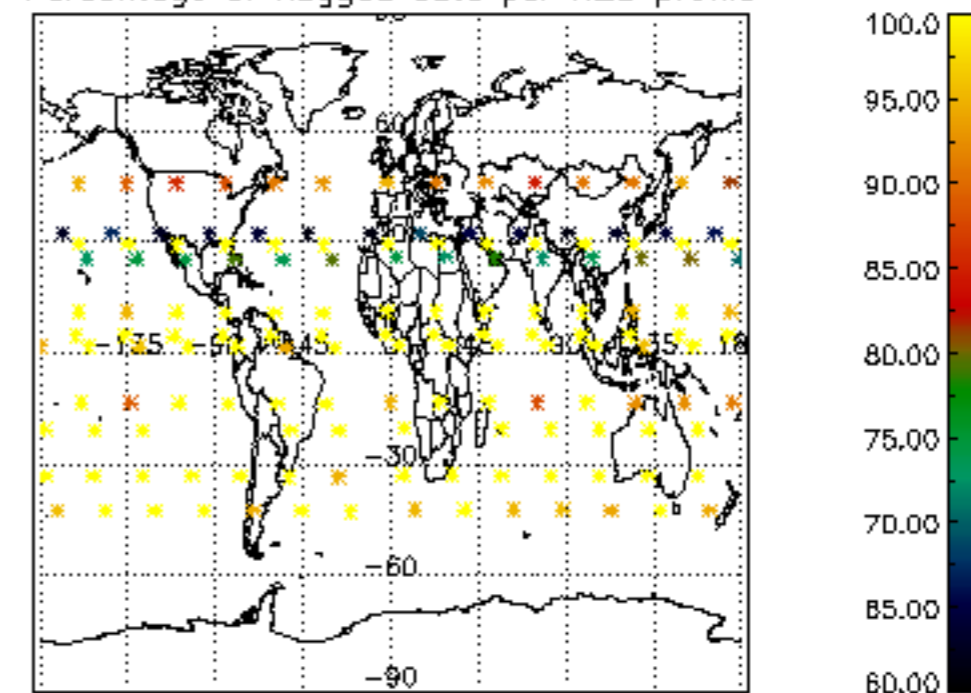
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	21-DEC-2008 00:04:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-DEC-2008 00:04:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-DEC-2008 00:04:25



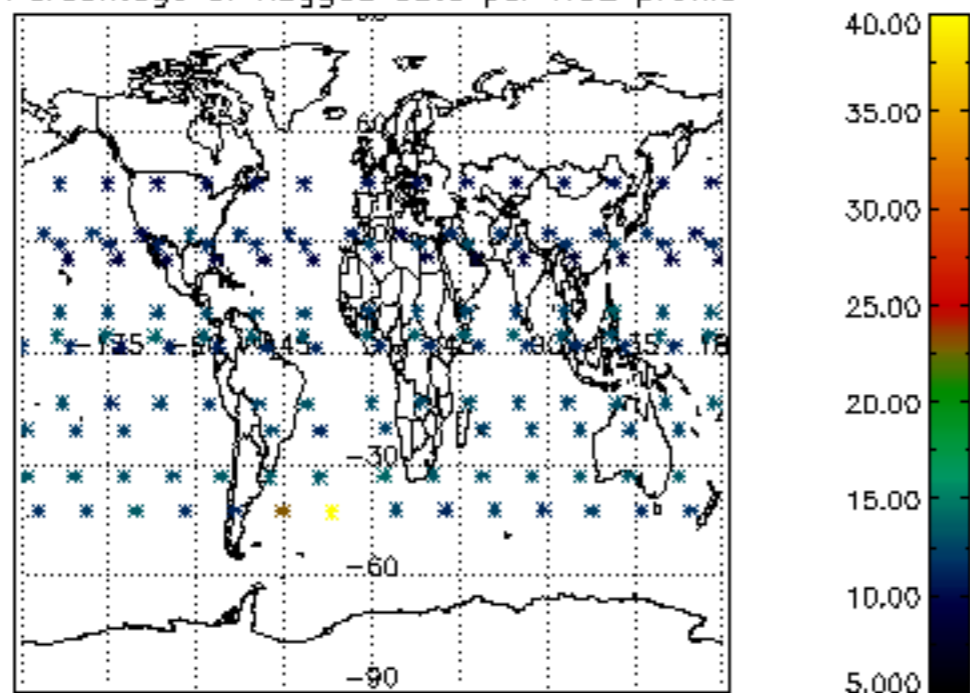
Percentage of flagged data per D3 profile



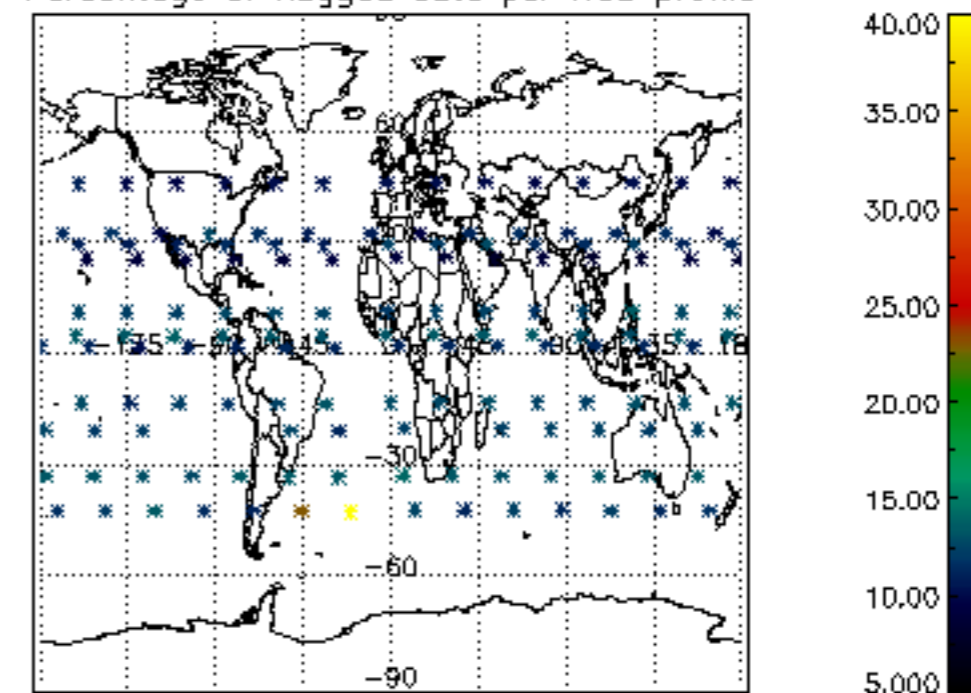
Percentage of flagged data per H2O profile

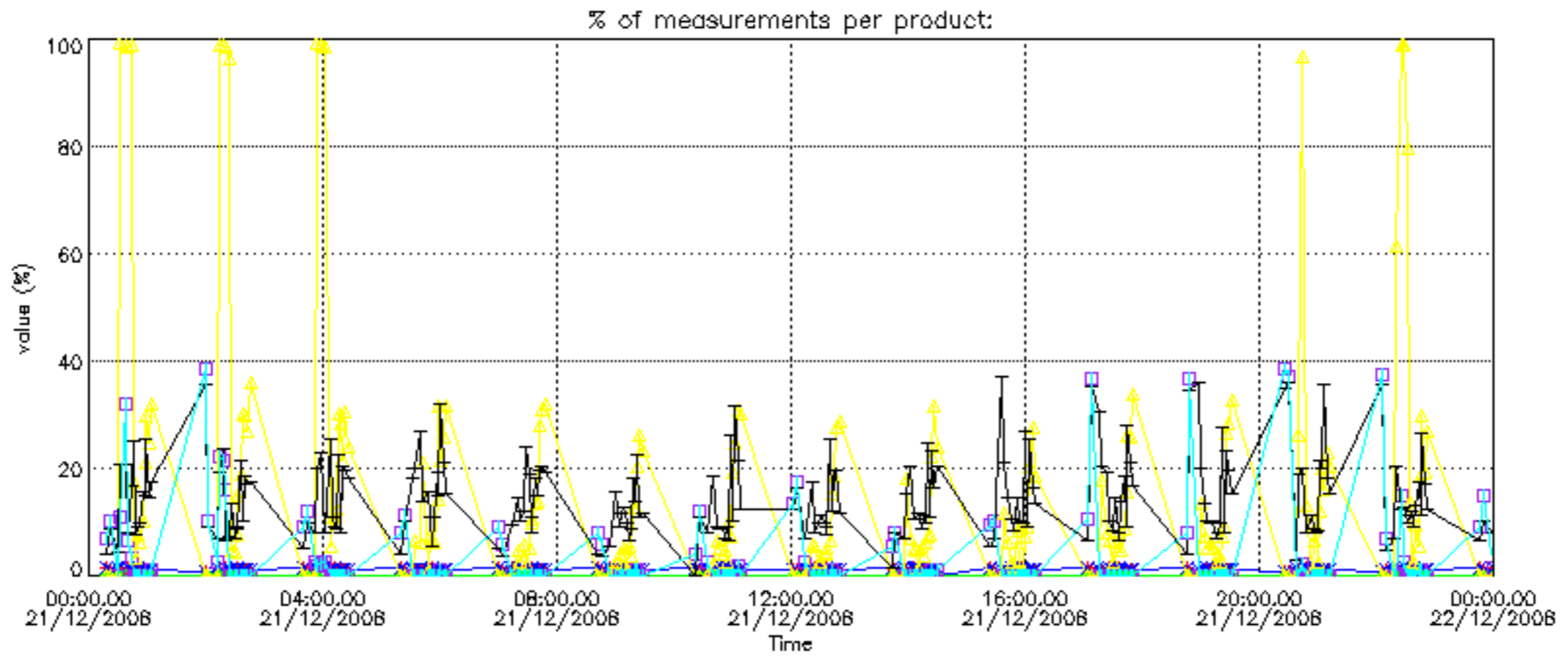


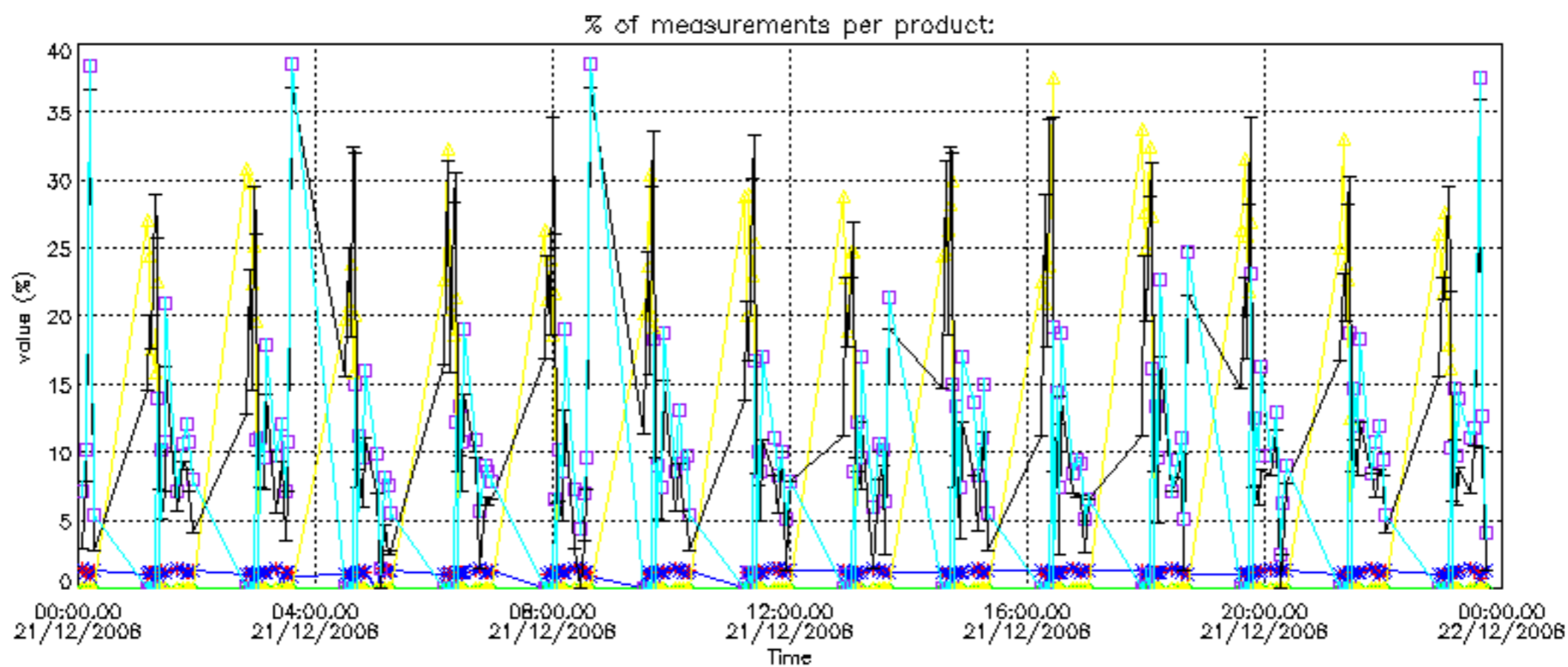
Percentage of flagged data per NO2 profile



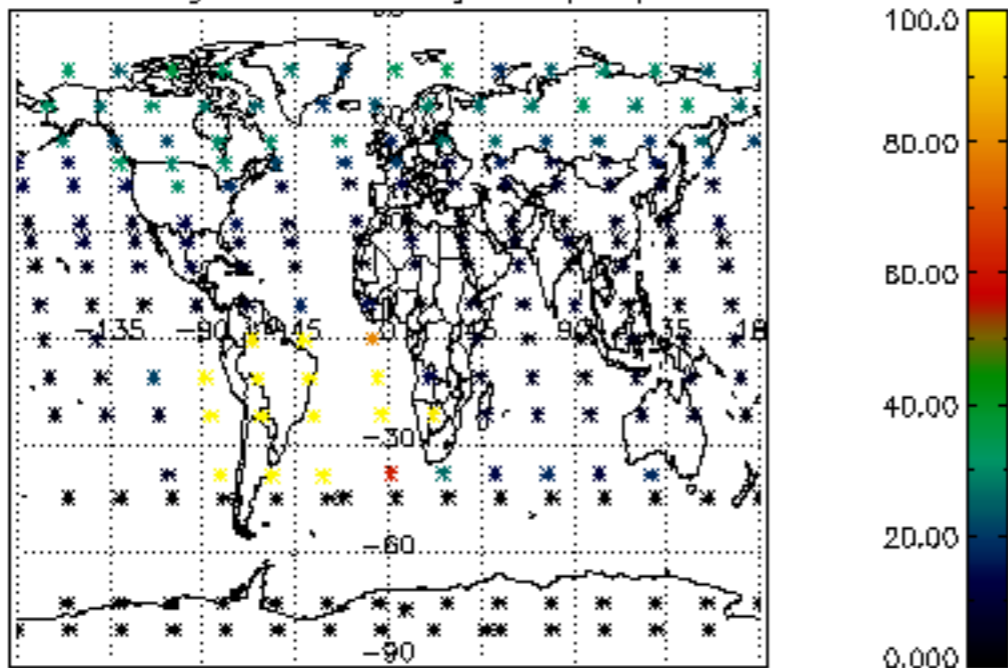
Percentage of flagged data per NO3 profile



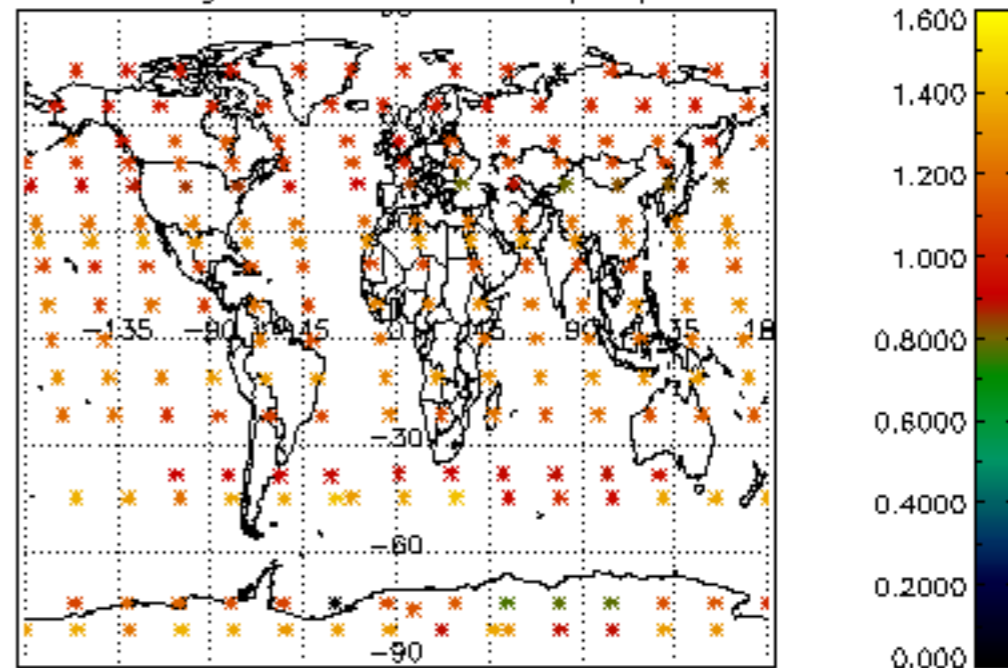




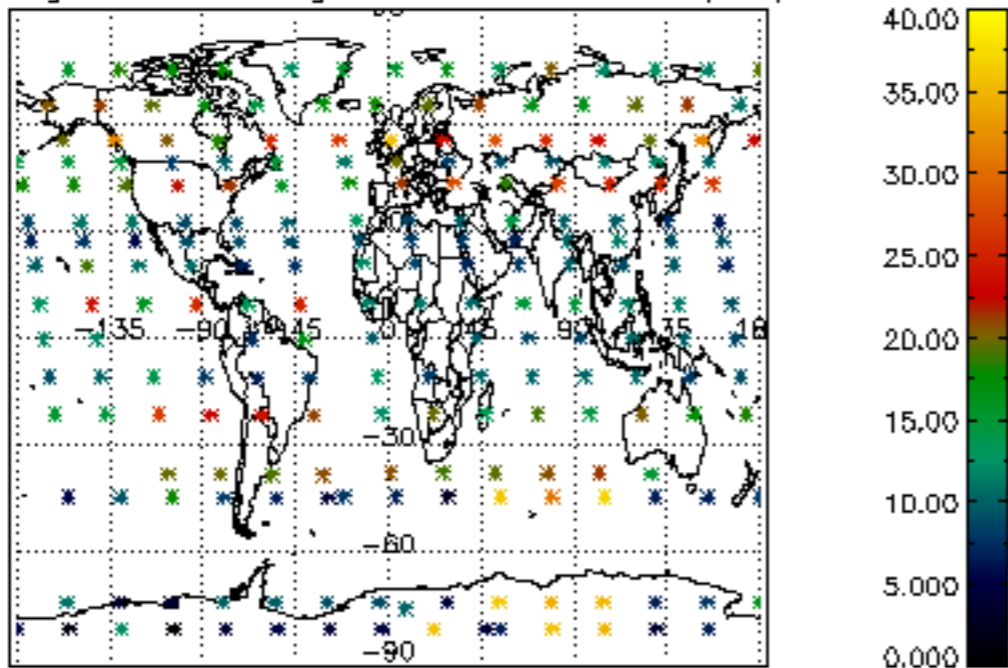
Percentage of cosmic ray hits per profile



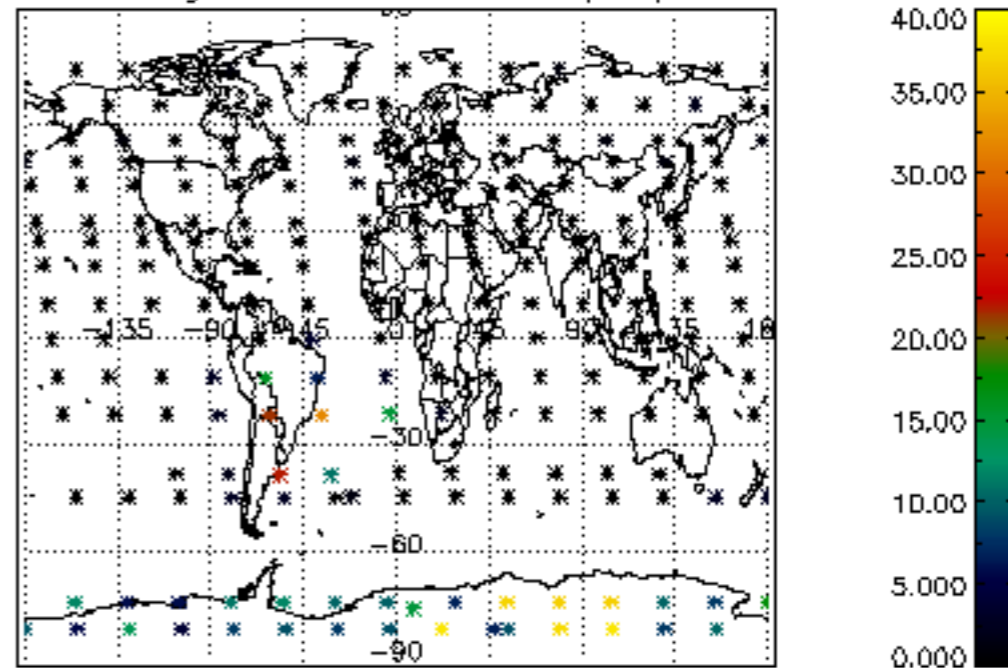
Percentage of datation errors per profile



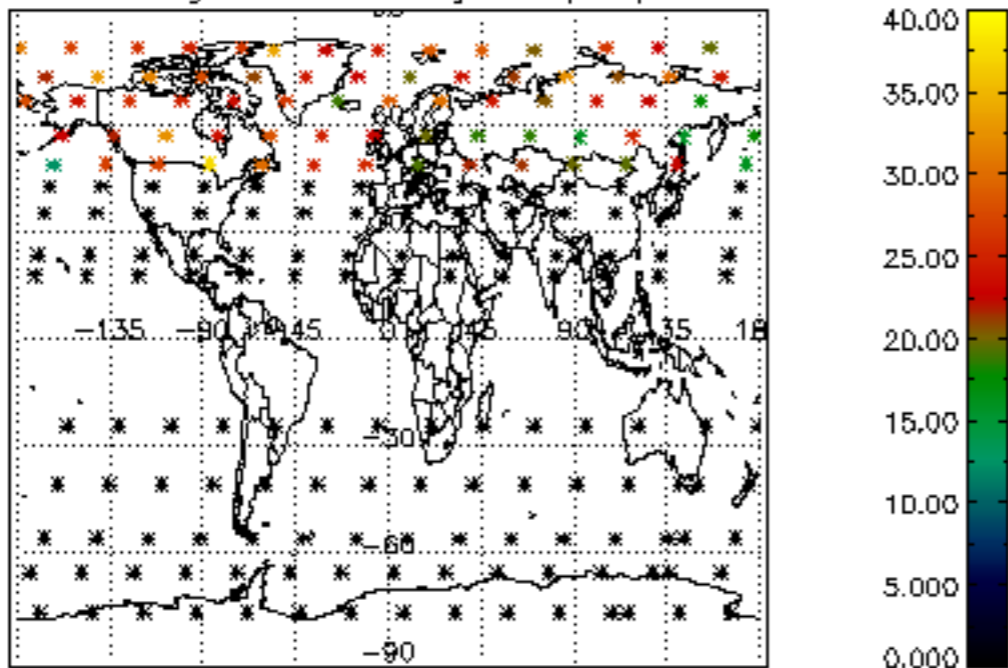
Percentage of star falling outside central band per profile



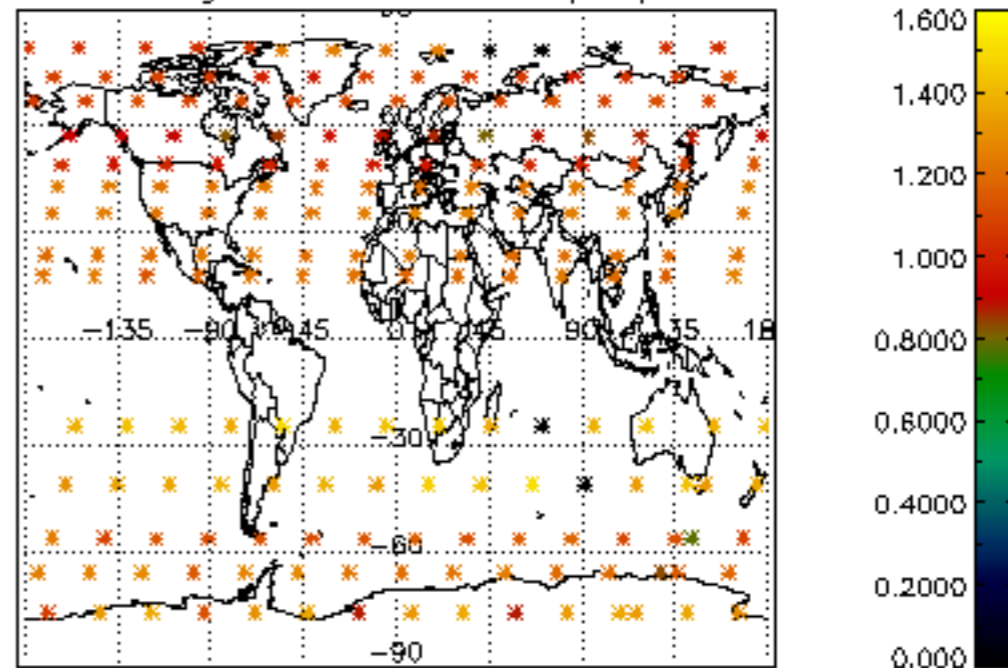
Percentage of saturation errors per profile



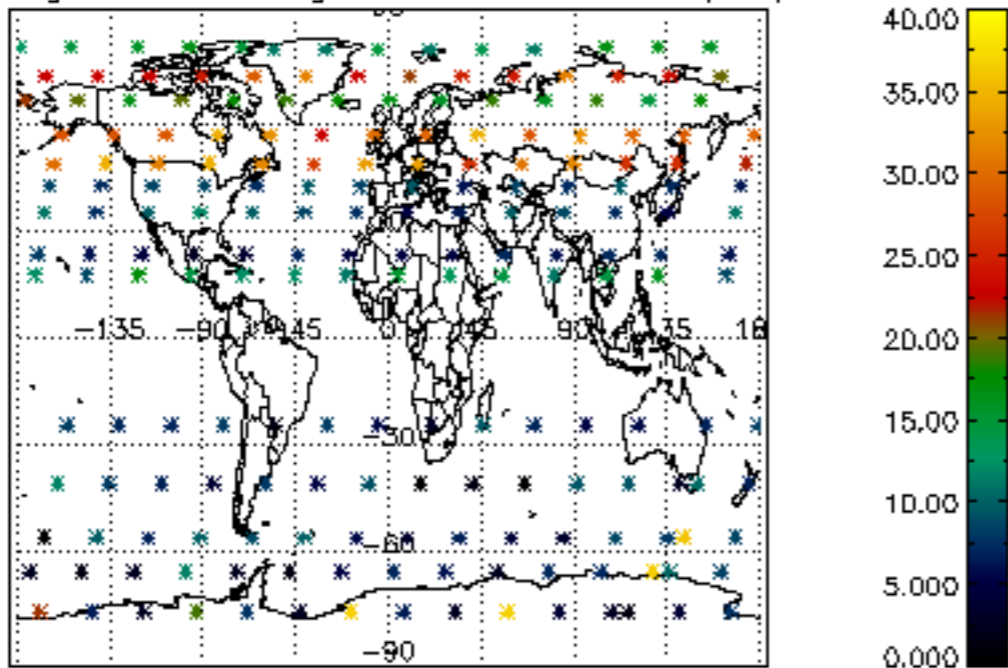
Percentage of cosmic ray hits per profile



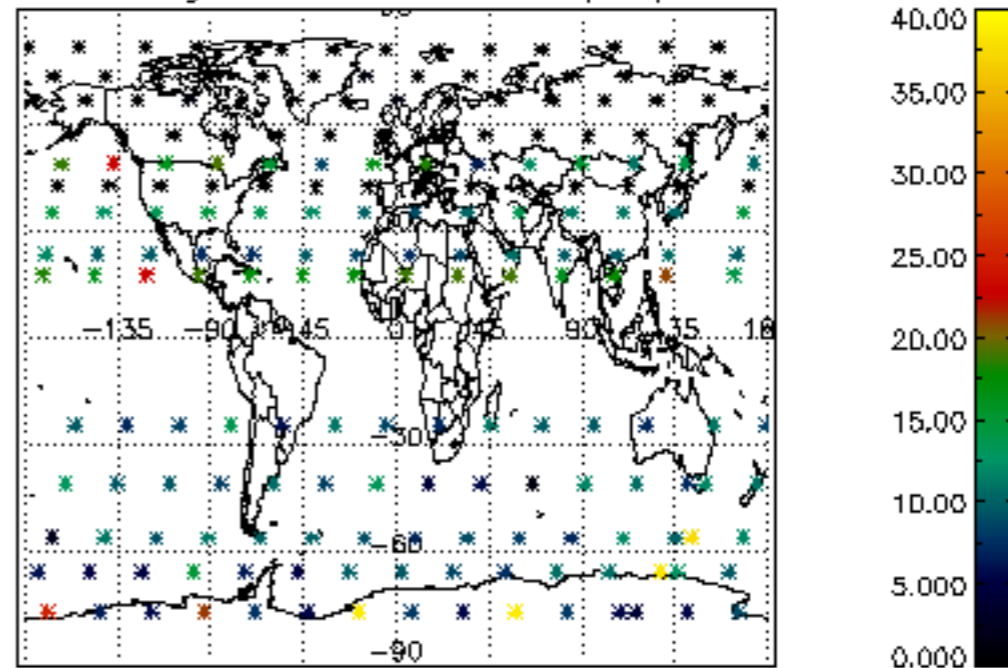
Percentage of datation errors per profile

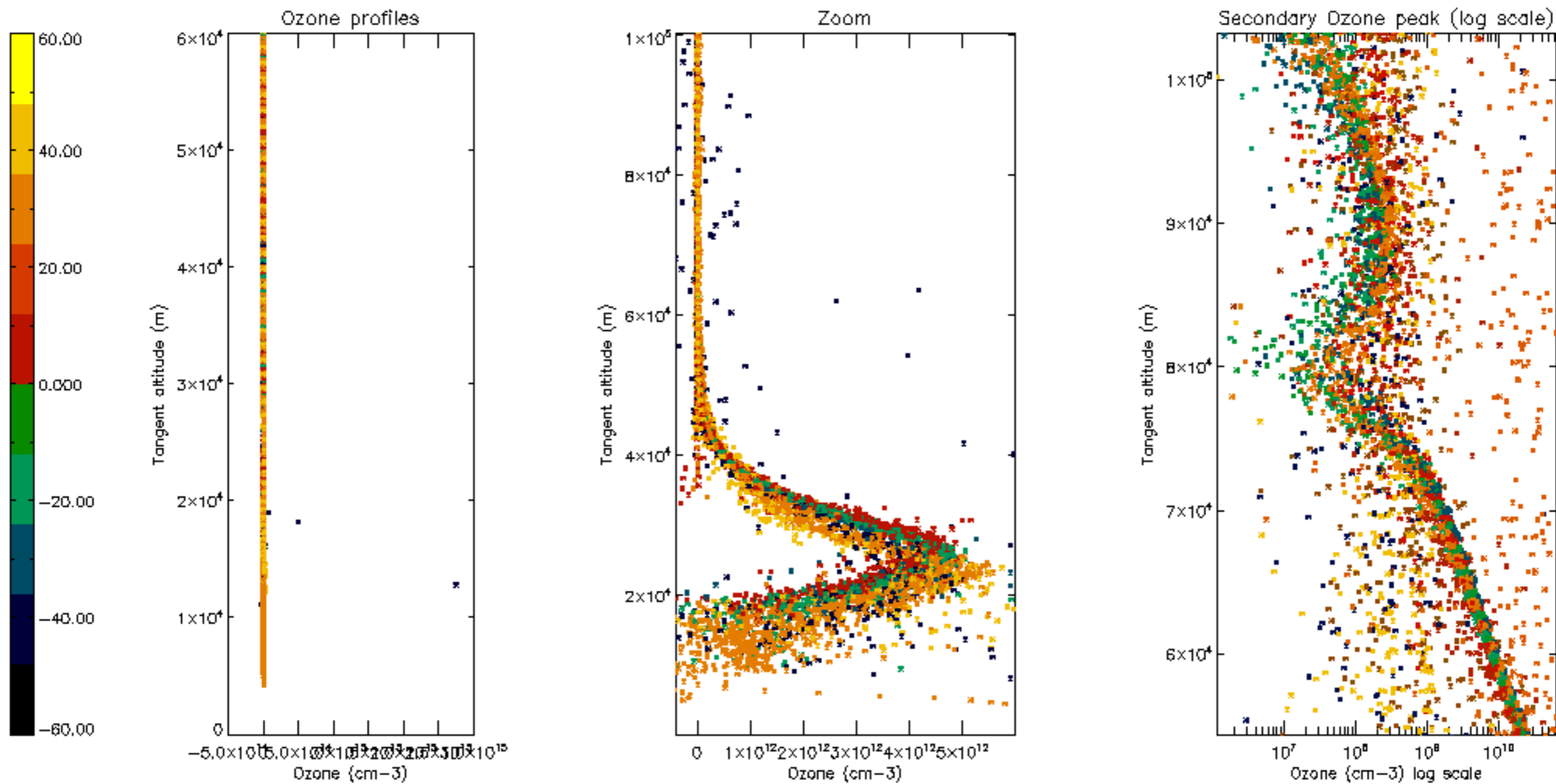


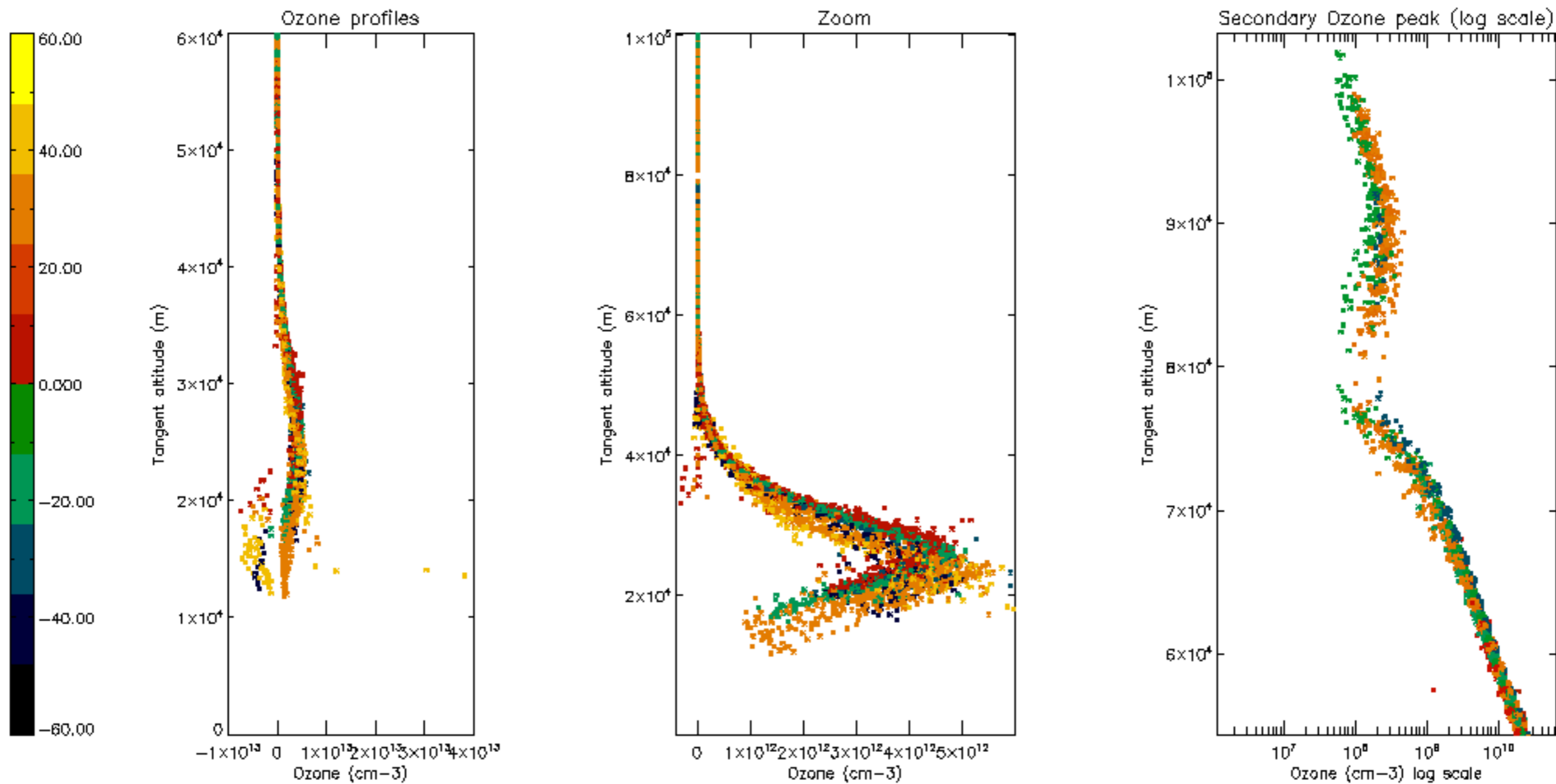
Percentage of star falling outside central band per profile

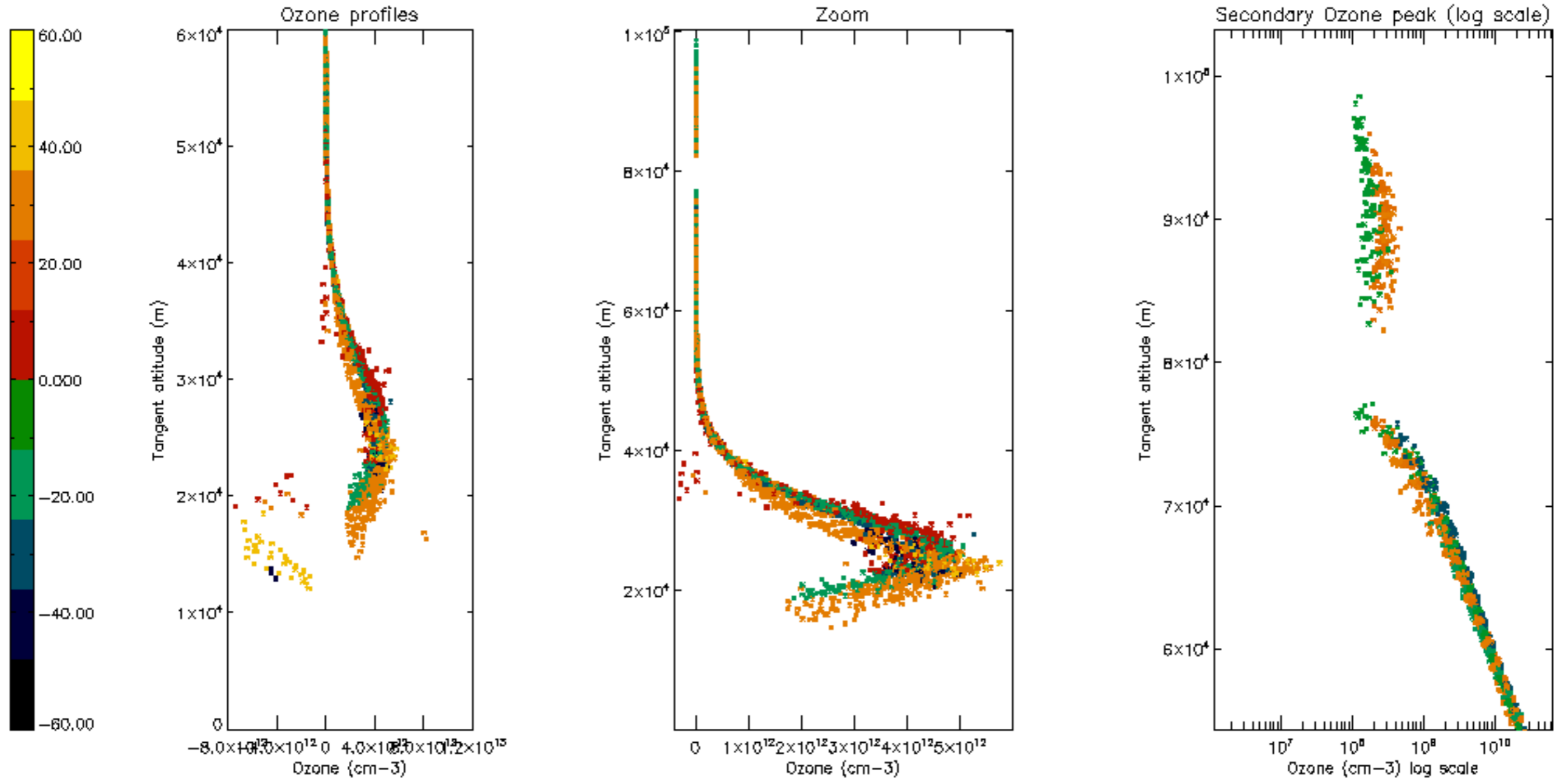


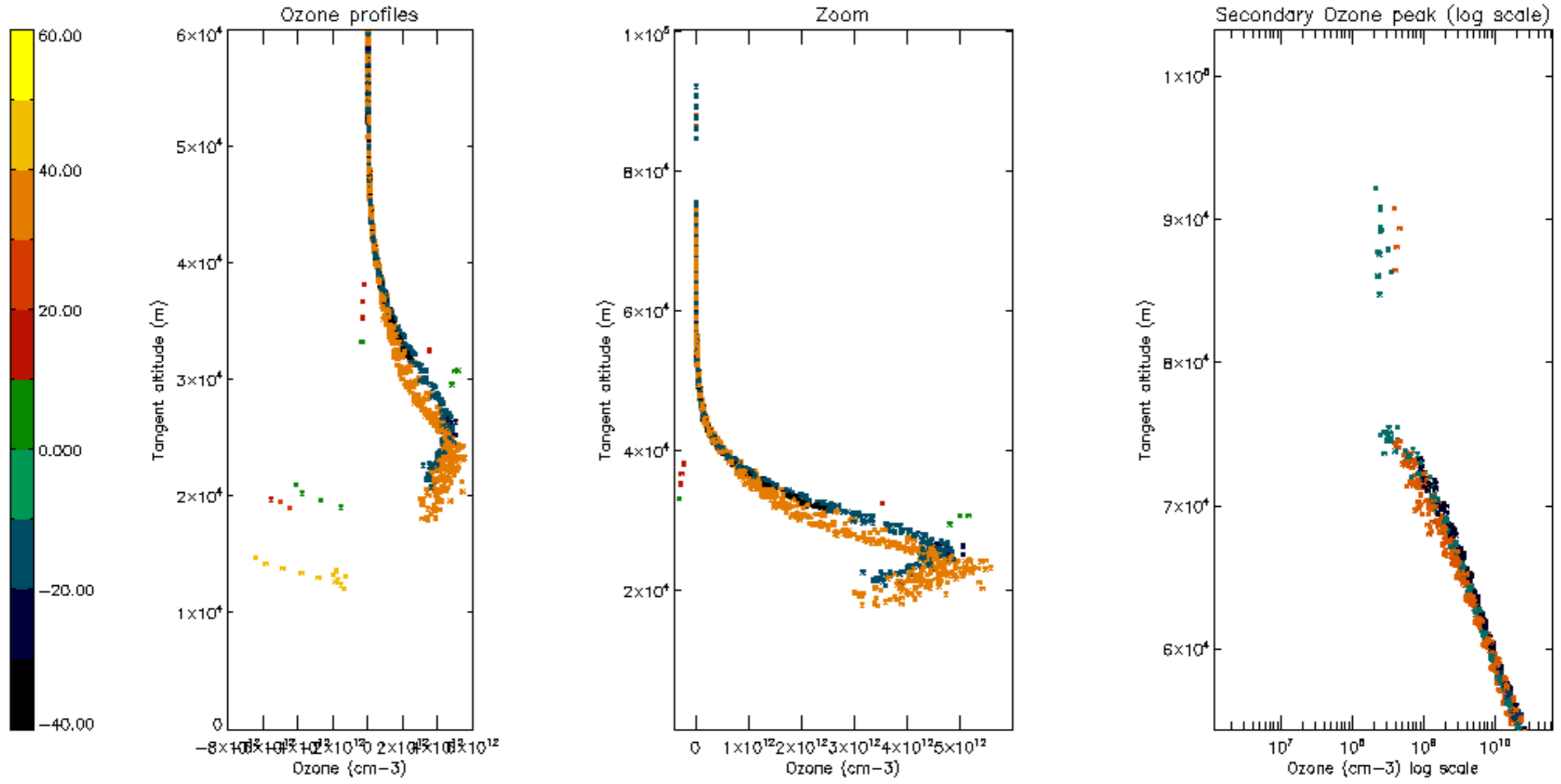
Percentage of saturation errors per profile

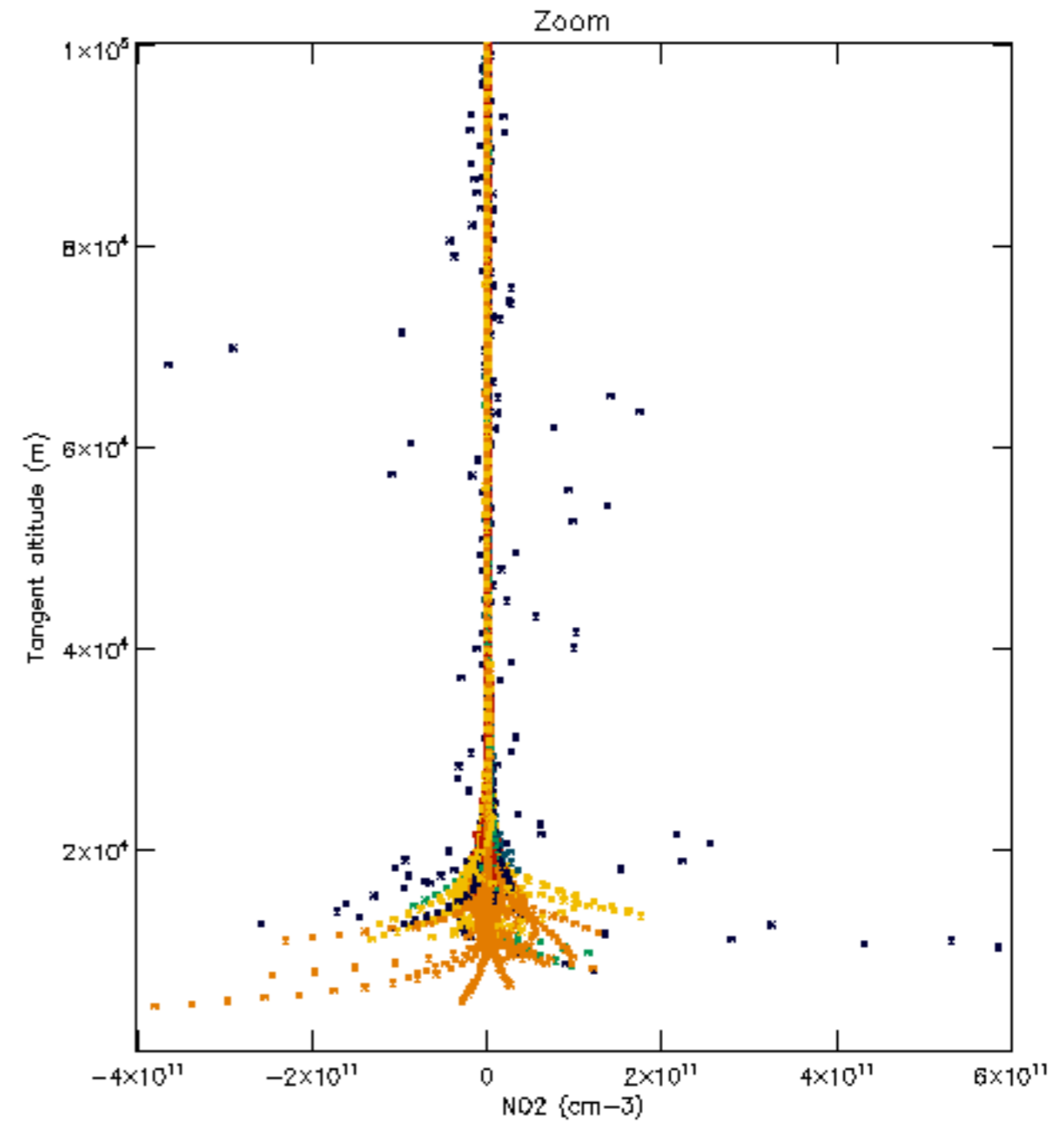
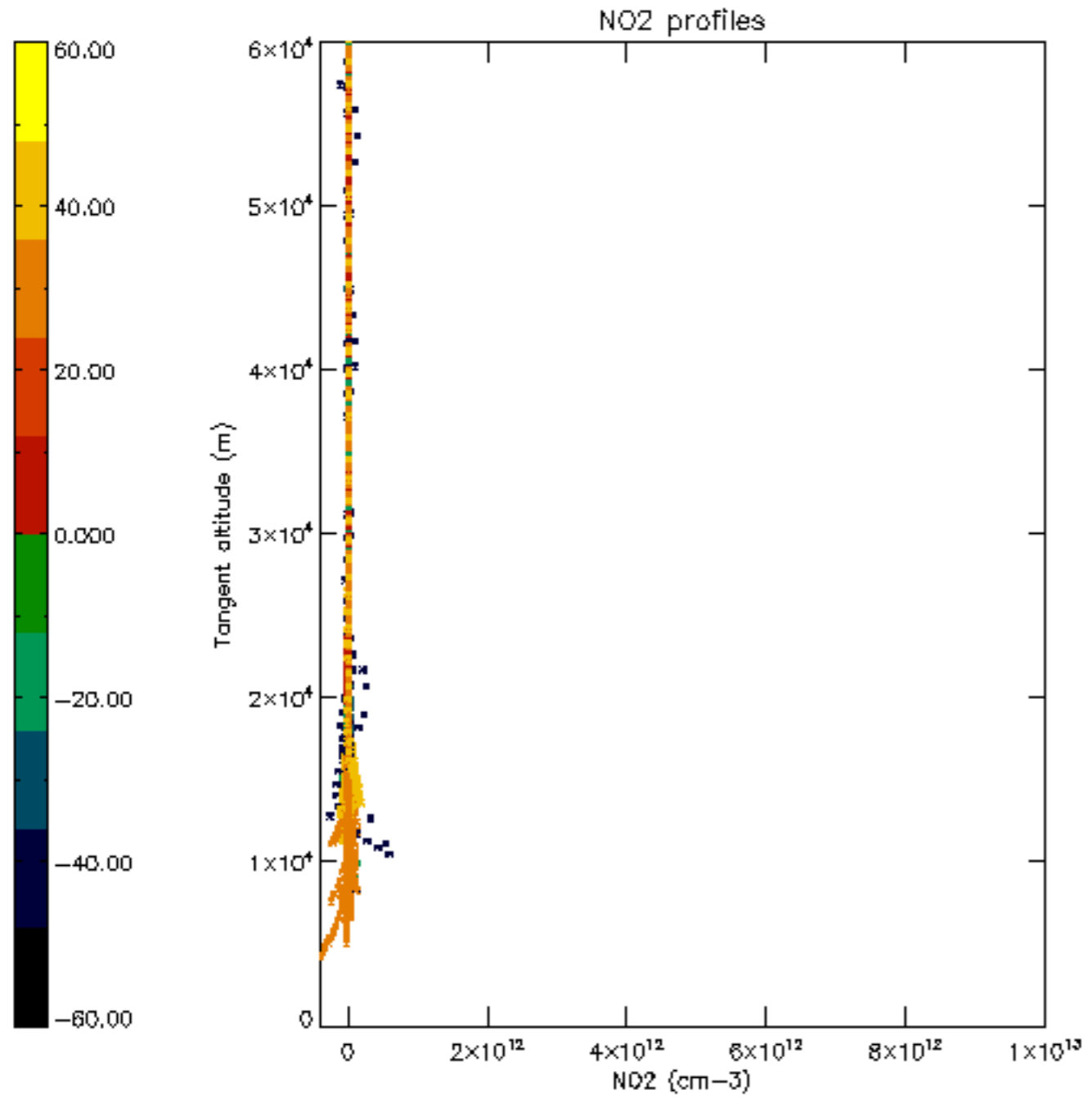


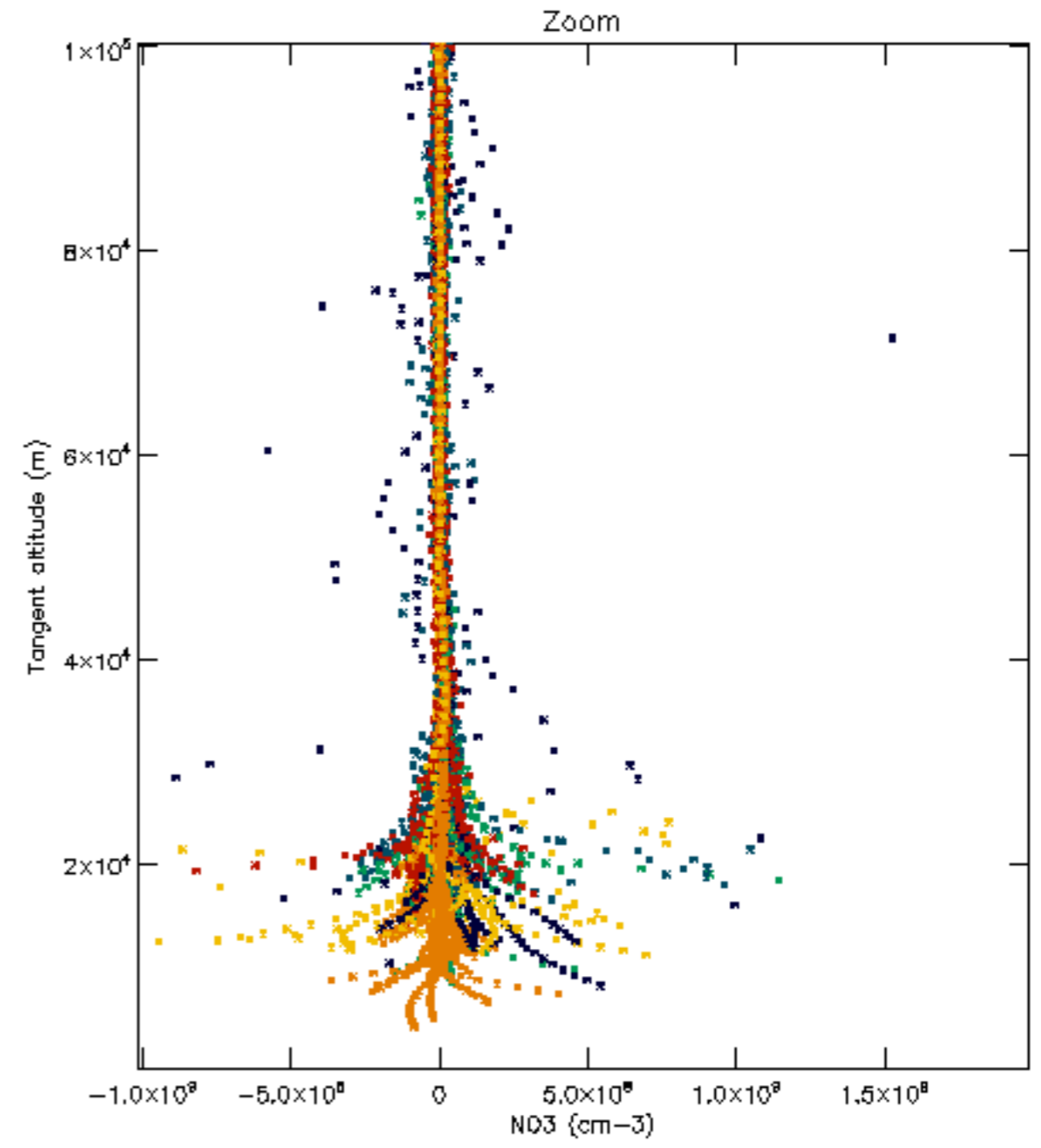
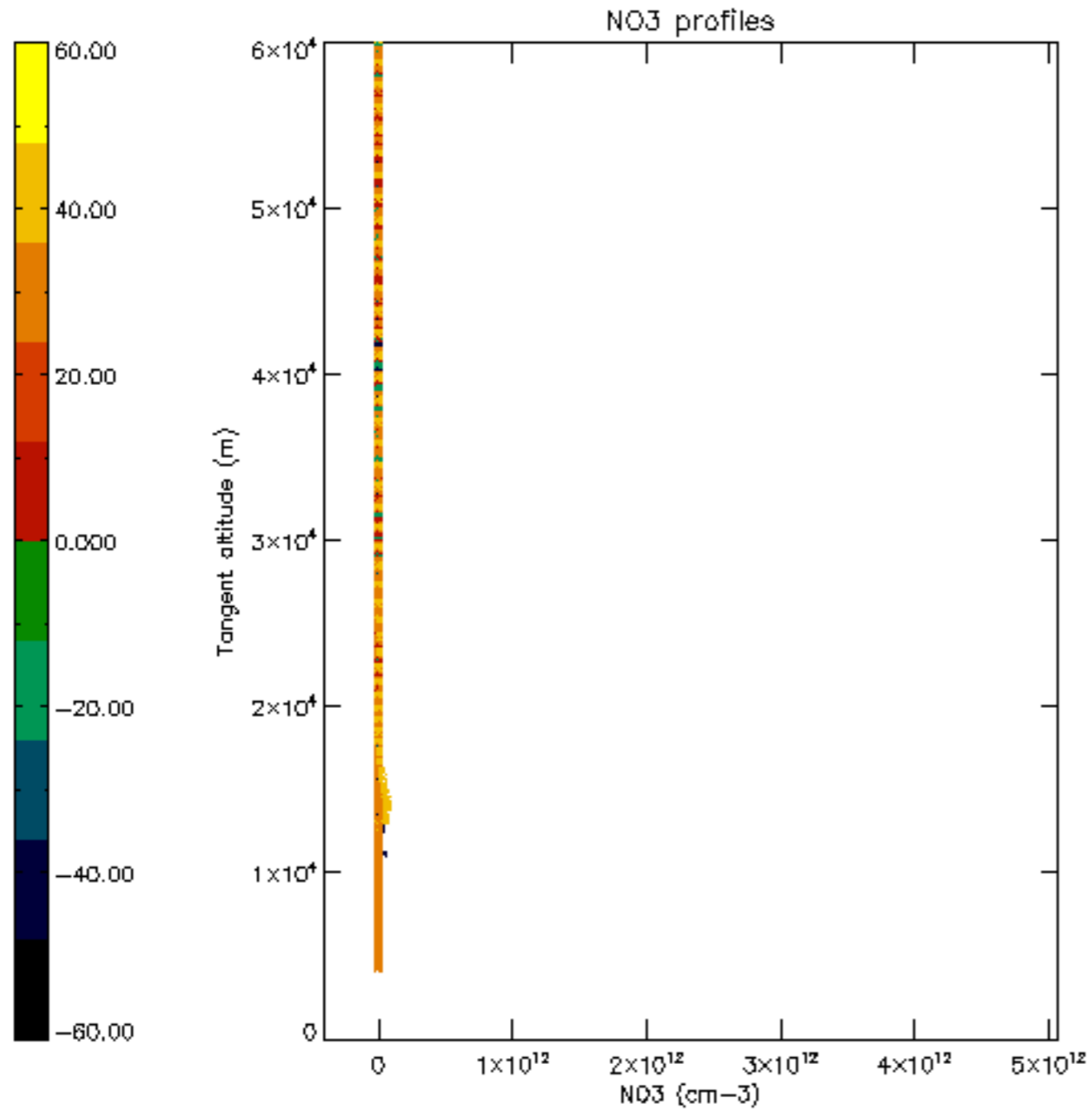


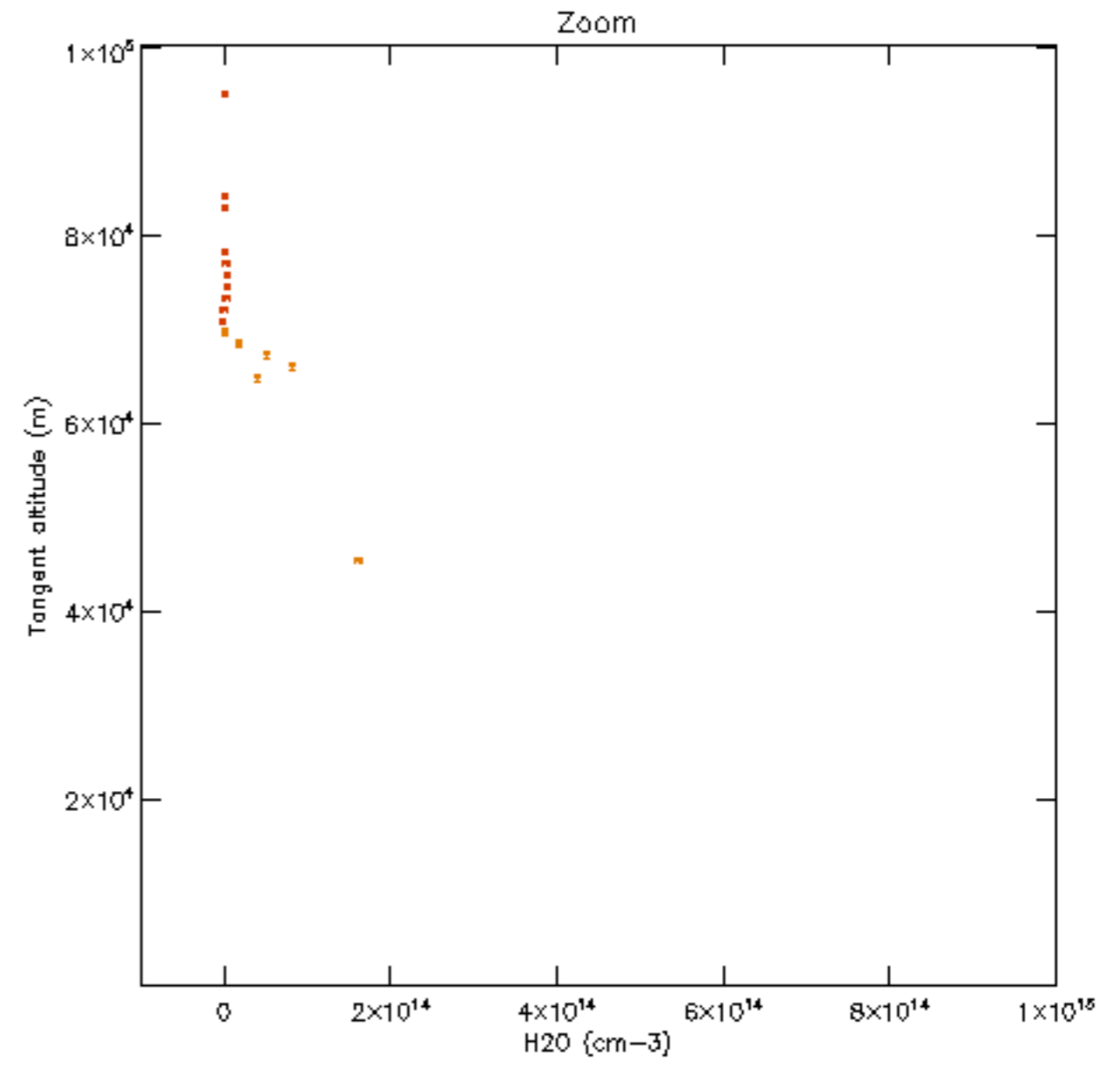
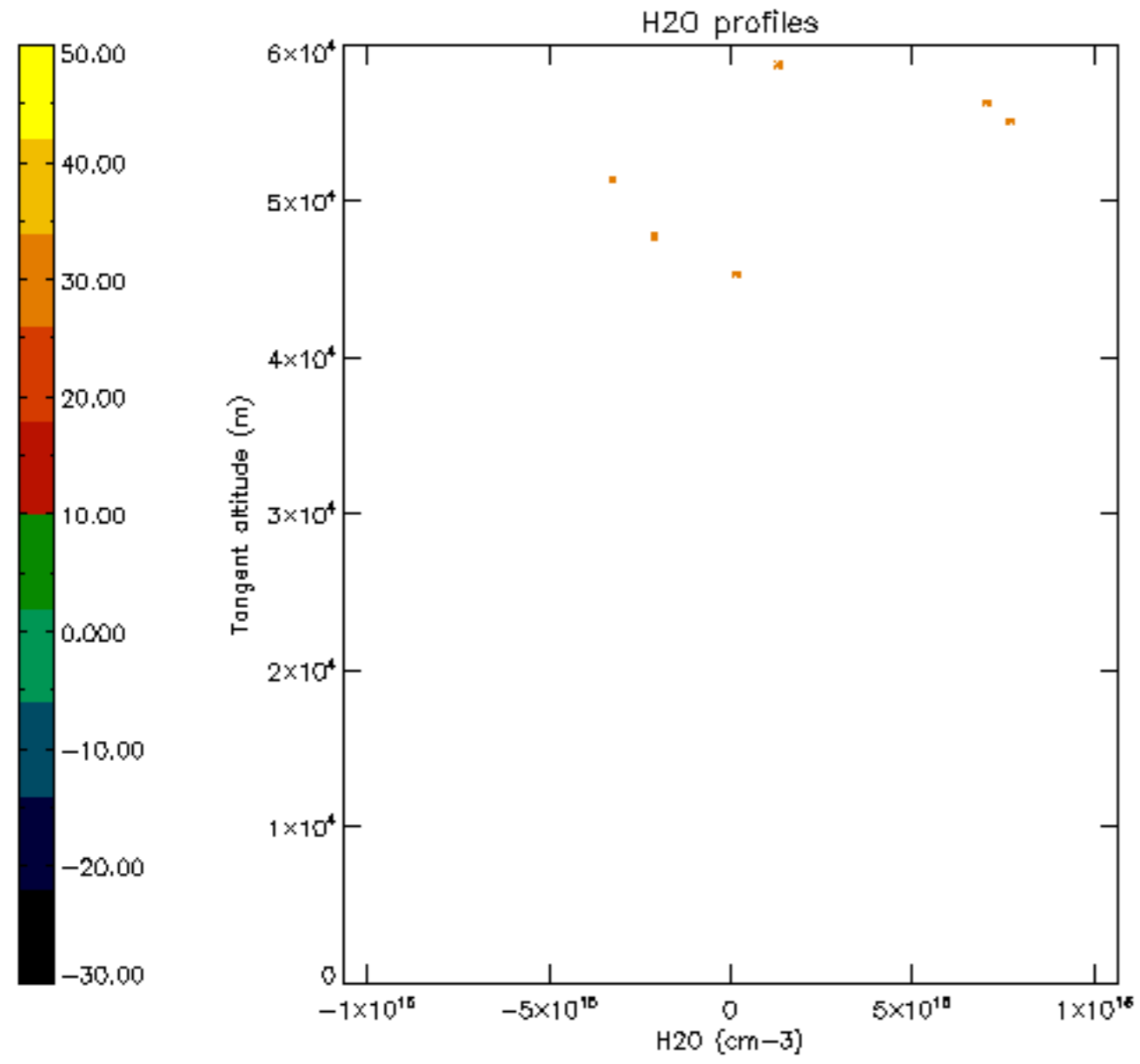


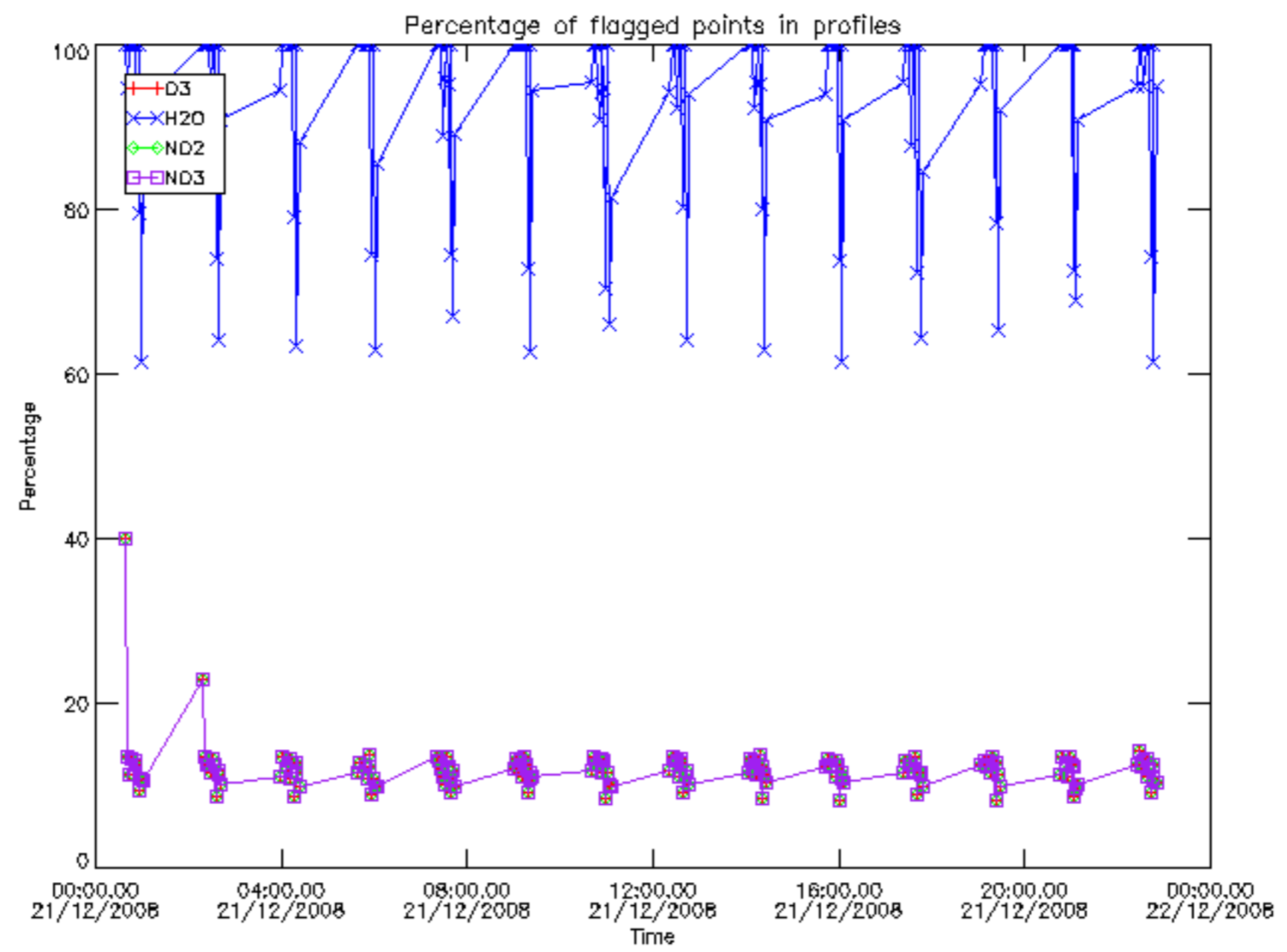




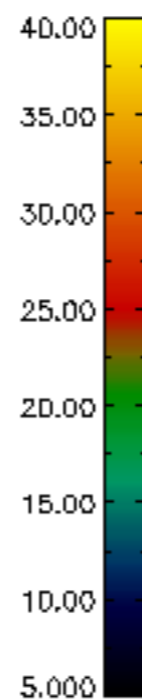
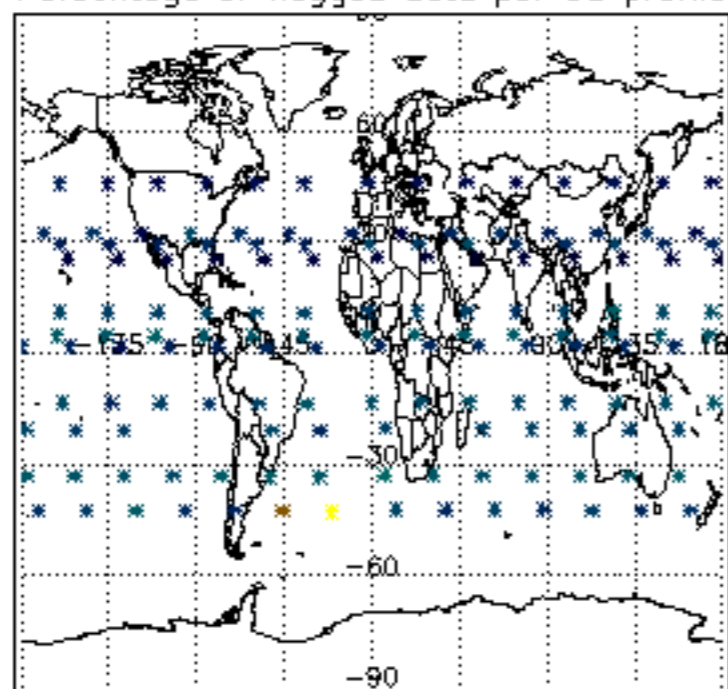




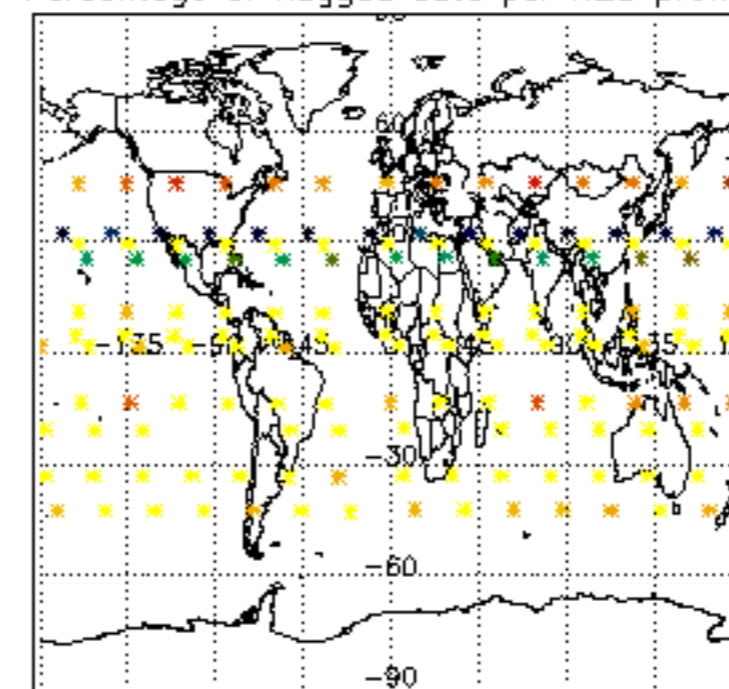




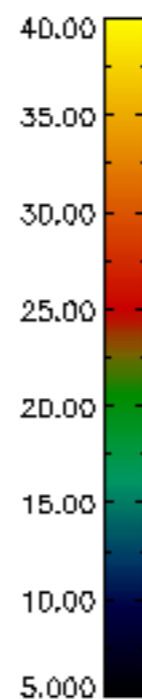
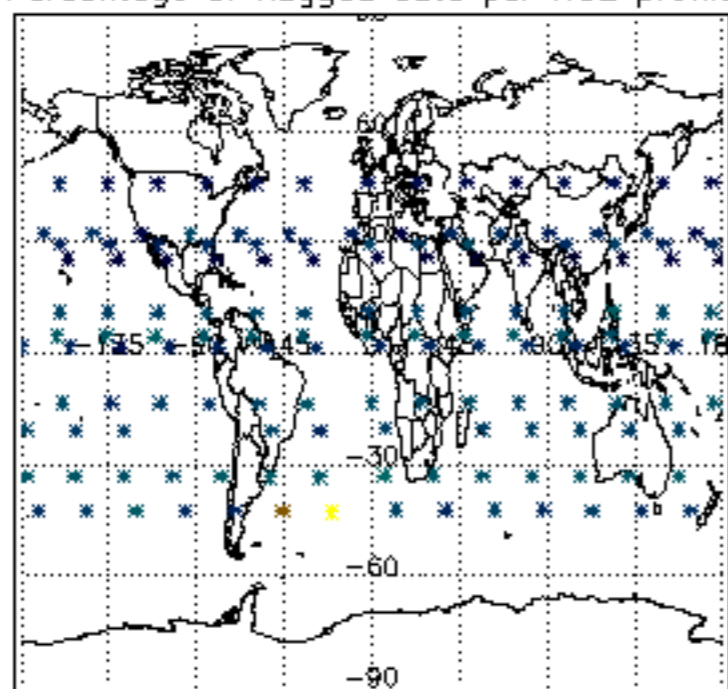
Percentage of flagged data per D3 profile



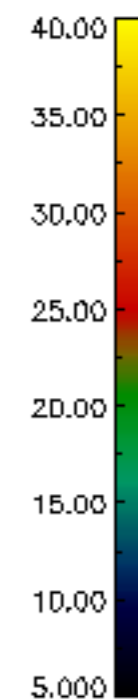
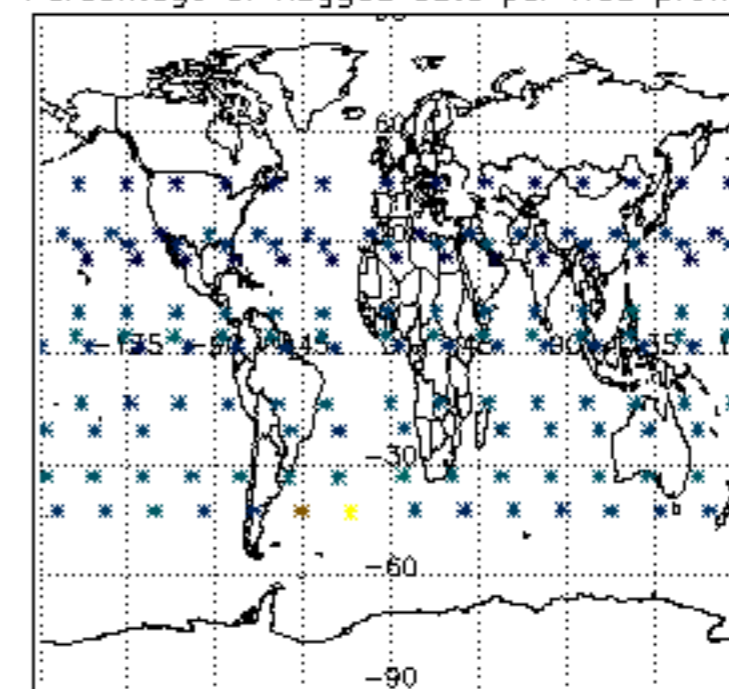
Percentage of flagged data per H2O profile

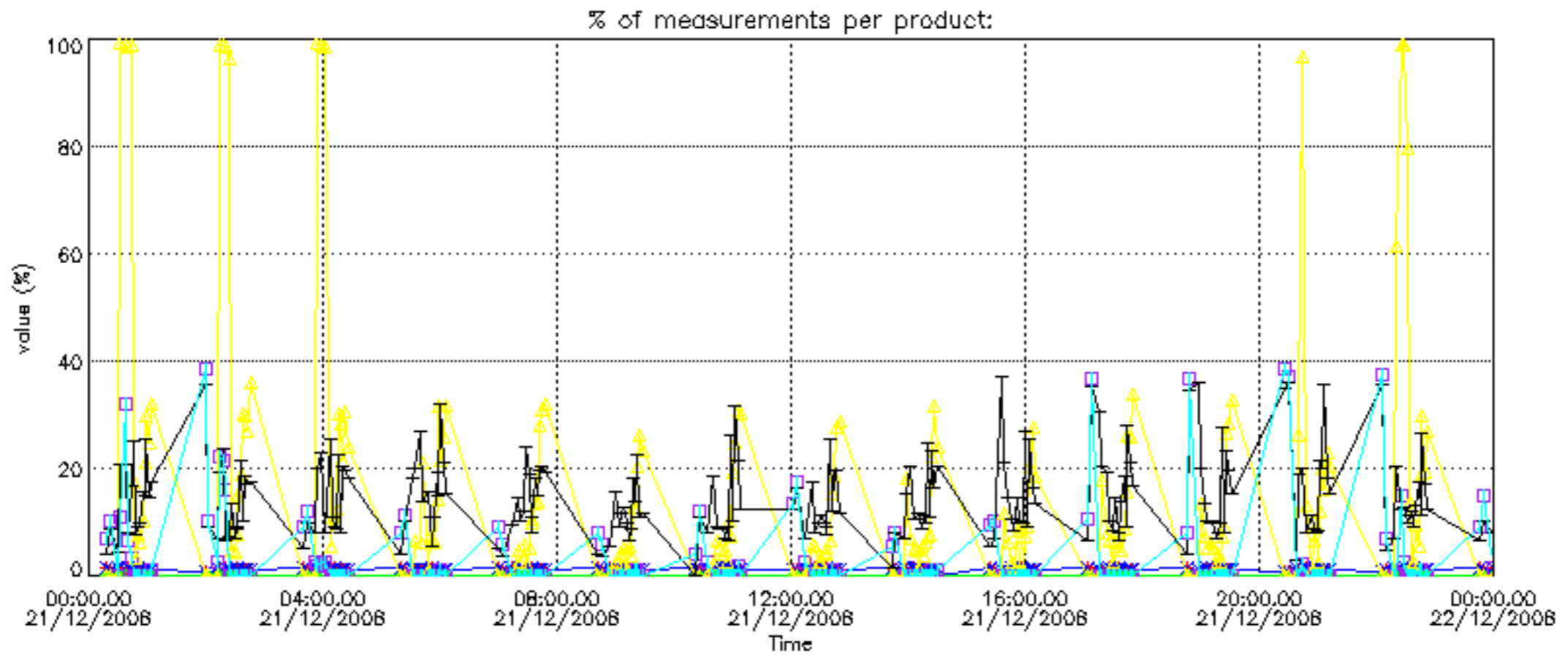


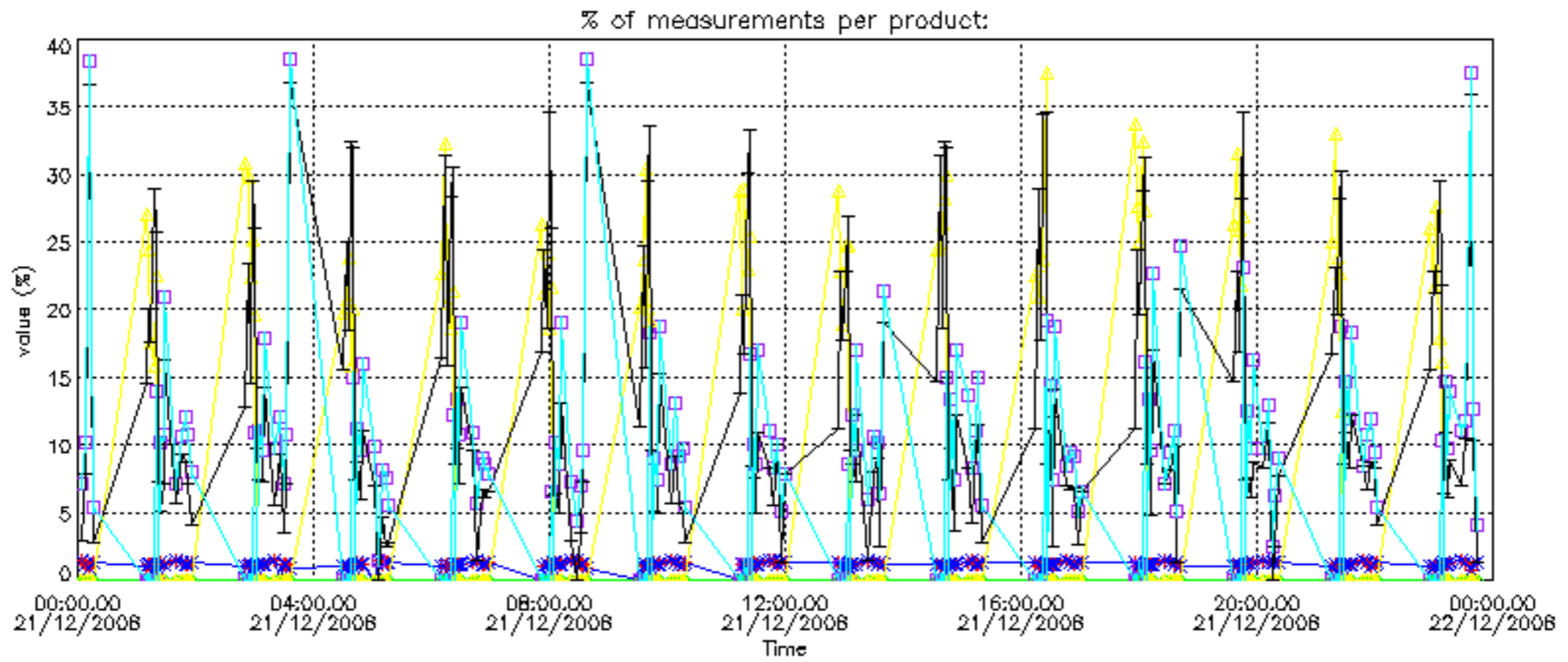
Percentage of flagged data per NO2 profile



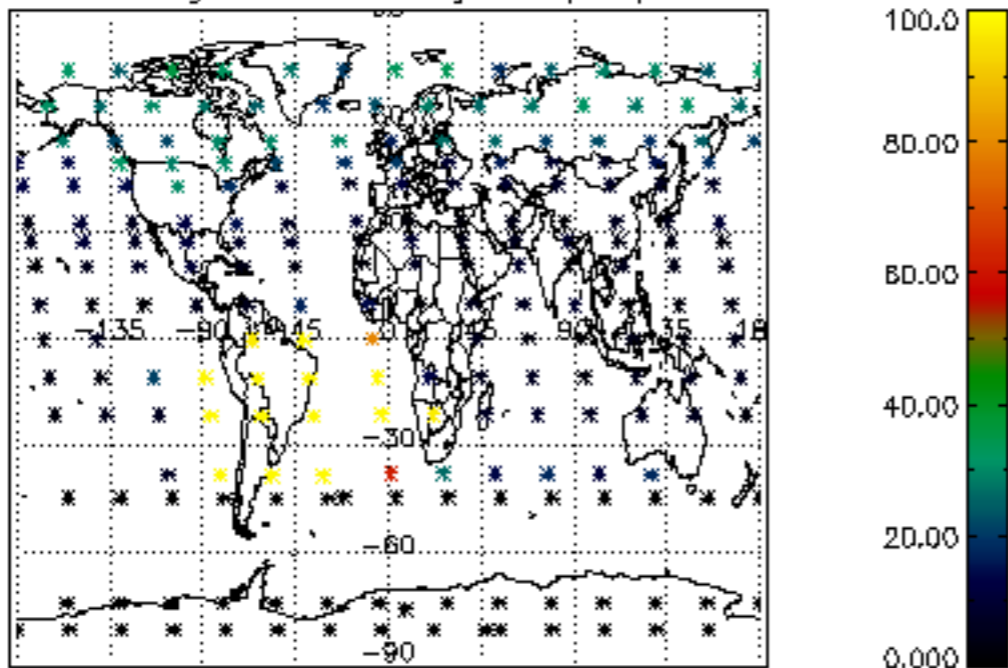
Percentage of flagged data per NO3 profile



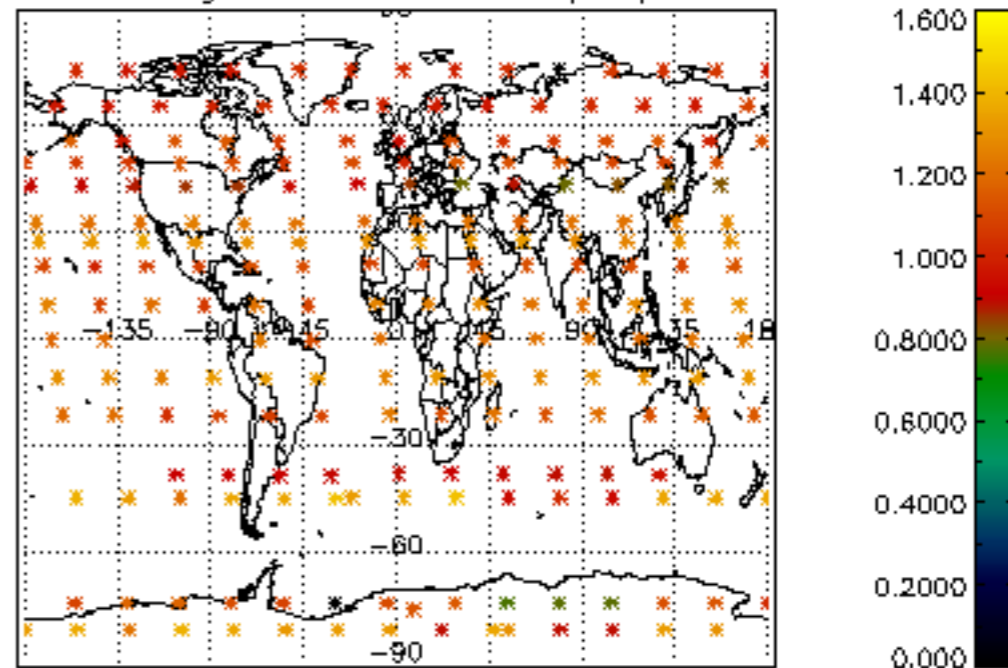




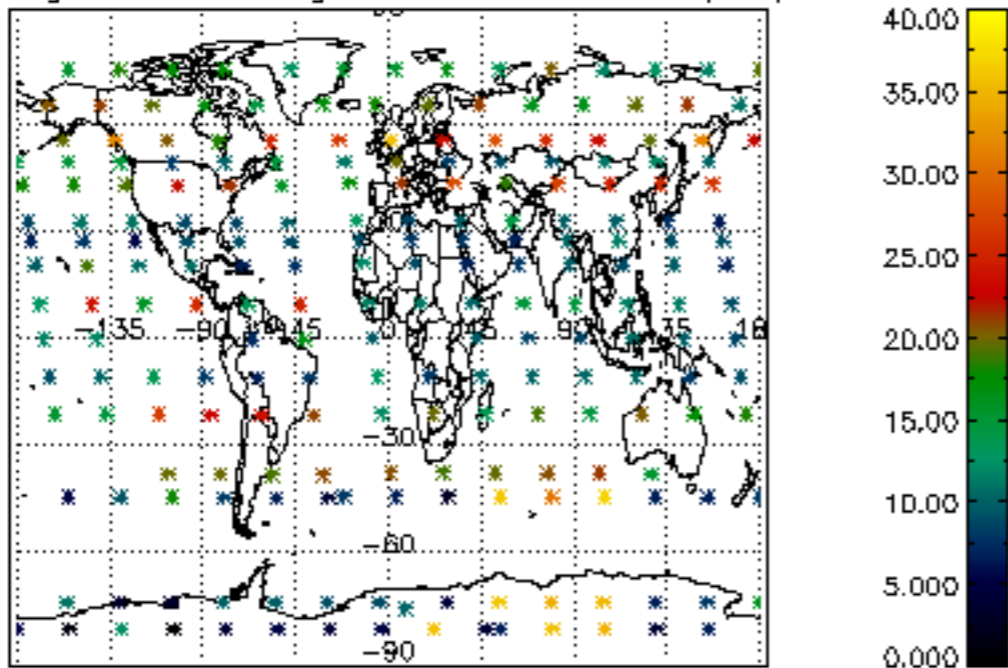
Percentage of cosmic ray hits per profile



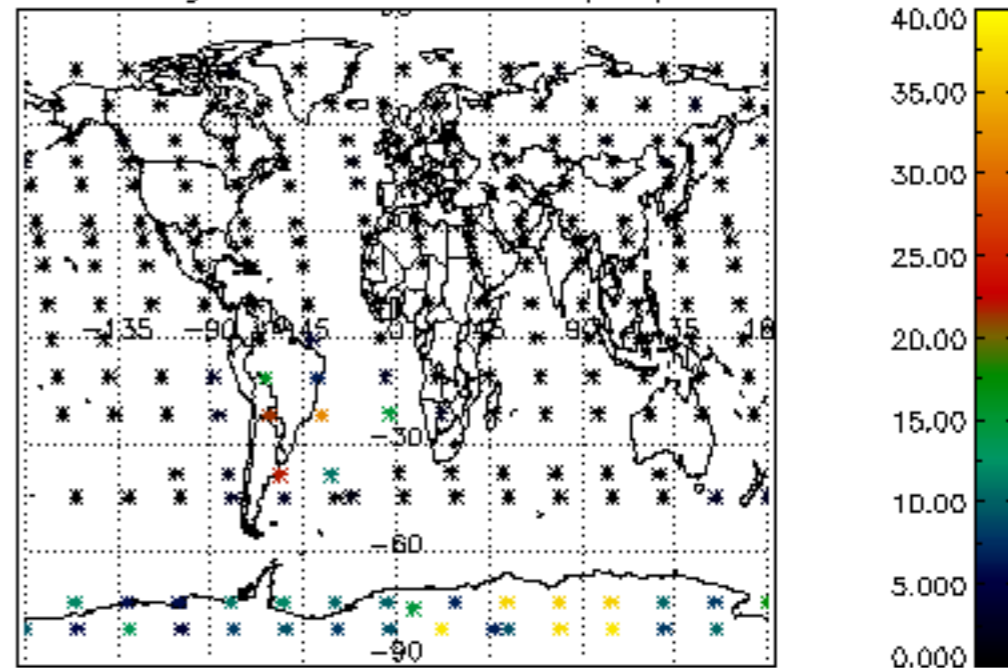
Percentage of datation errors per profile



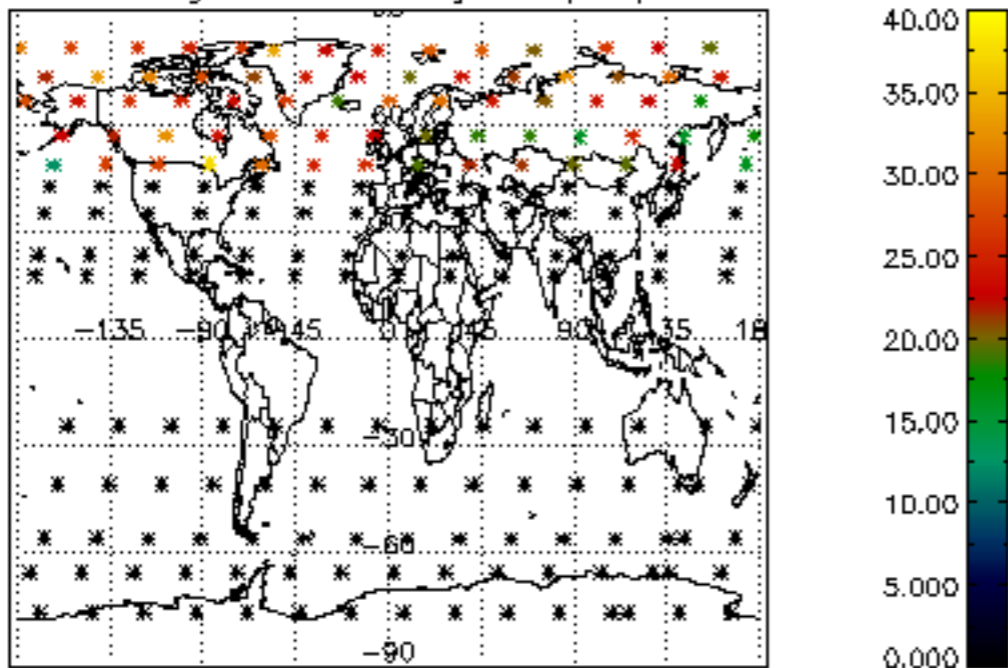
Percentage of star falling outside central band per profile



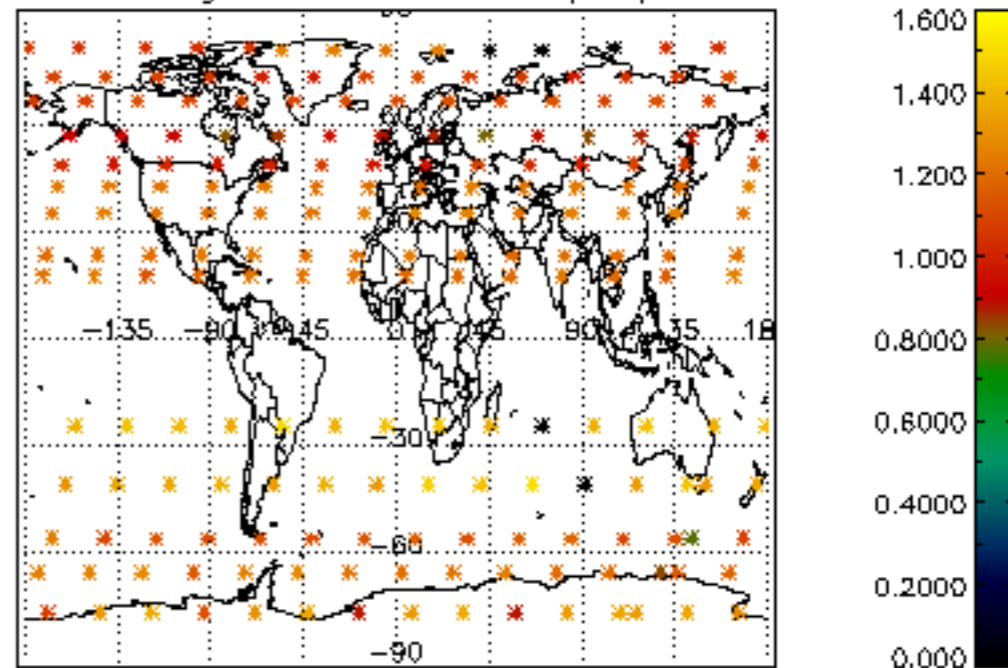
Percentage of saturation errors per profile



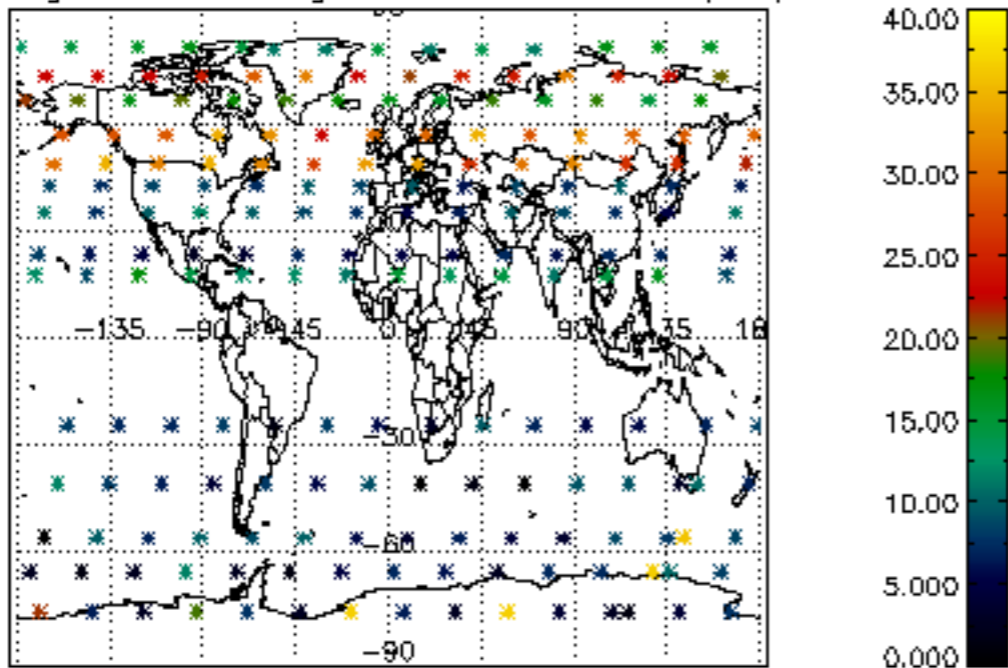
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

