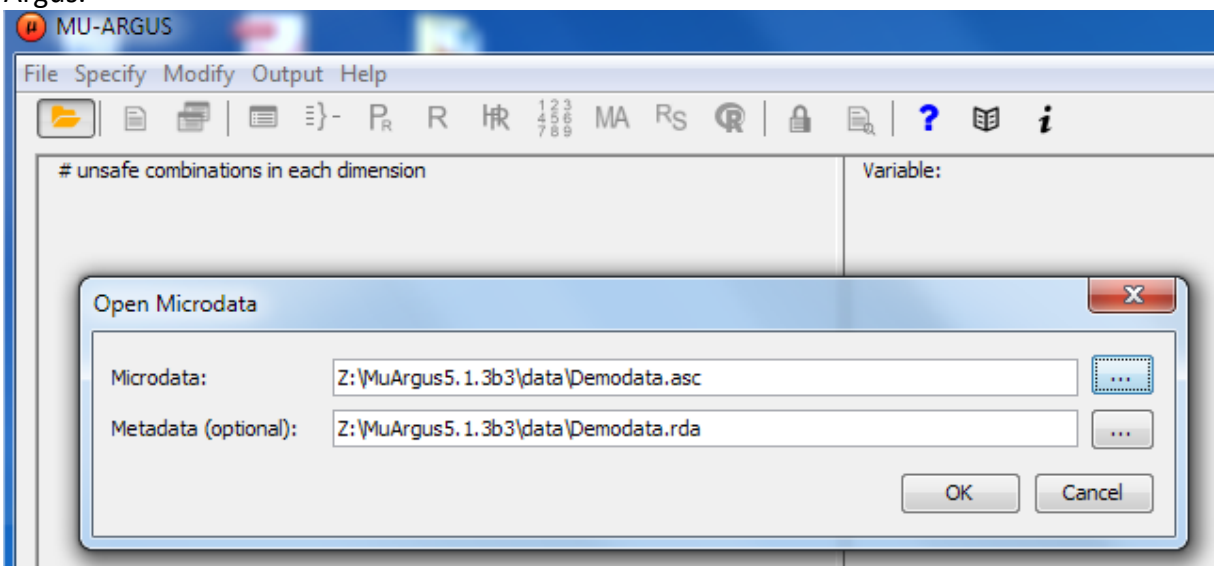
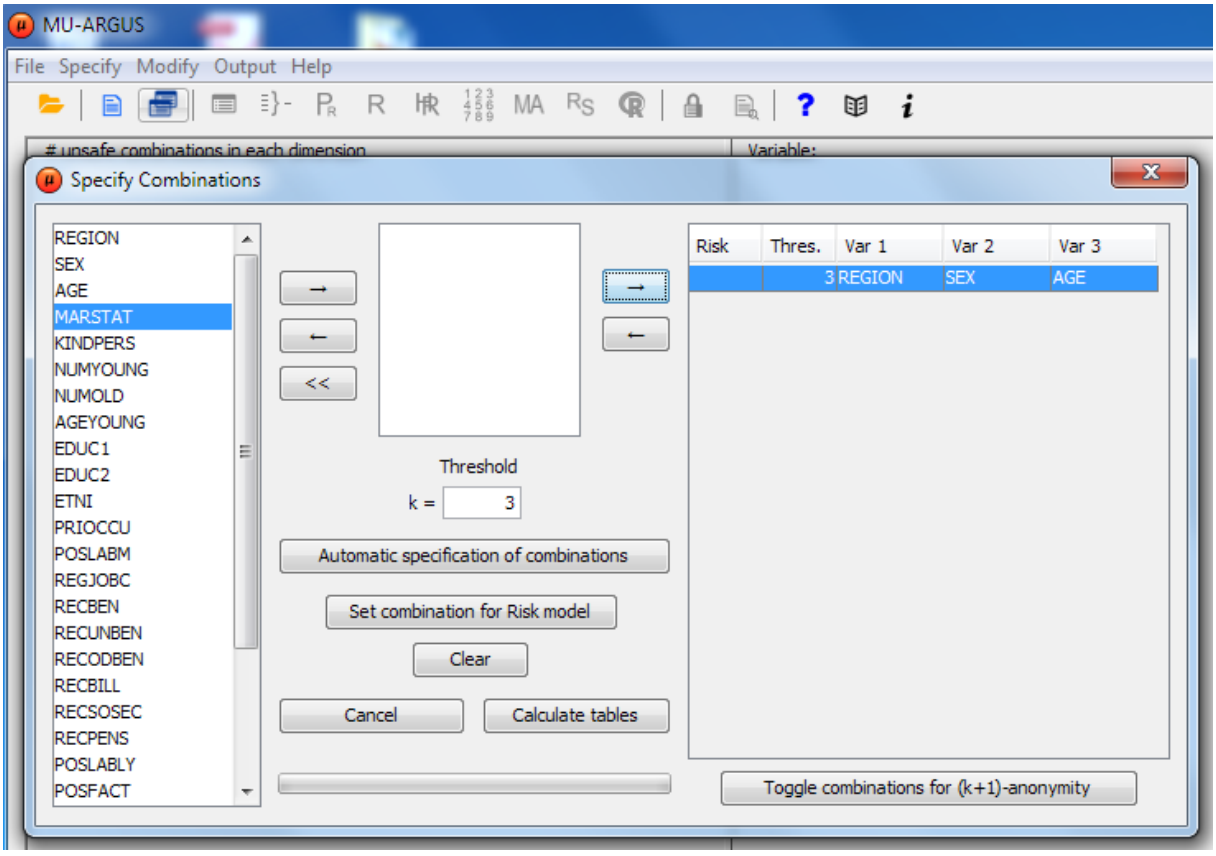
Step-by-step test procedure – MuArgus

This document provides a step-by-step procedure to test two main features of μ-Argus. This test procedure uses the dataset Demodata.asc provided in the installation packages. It applies suppression to obtain a 3-anonymous dataset based on 3 quasi-identifiers Region Sex and Age. A first anonymized dataset is done without any recoding. A second dataset is done by recoding the variable Age before applying suppressions. It uses μ-Argus 5.1.3b3.

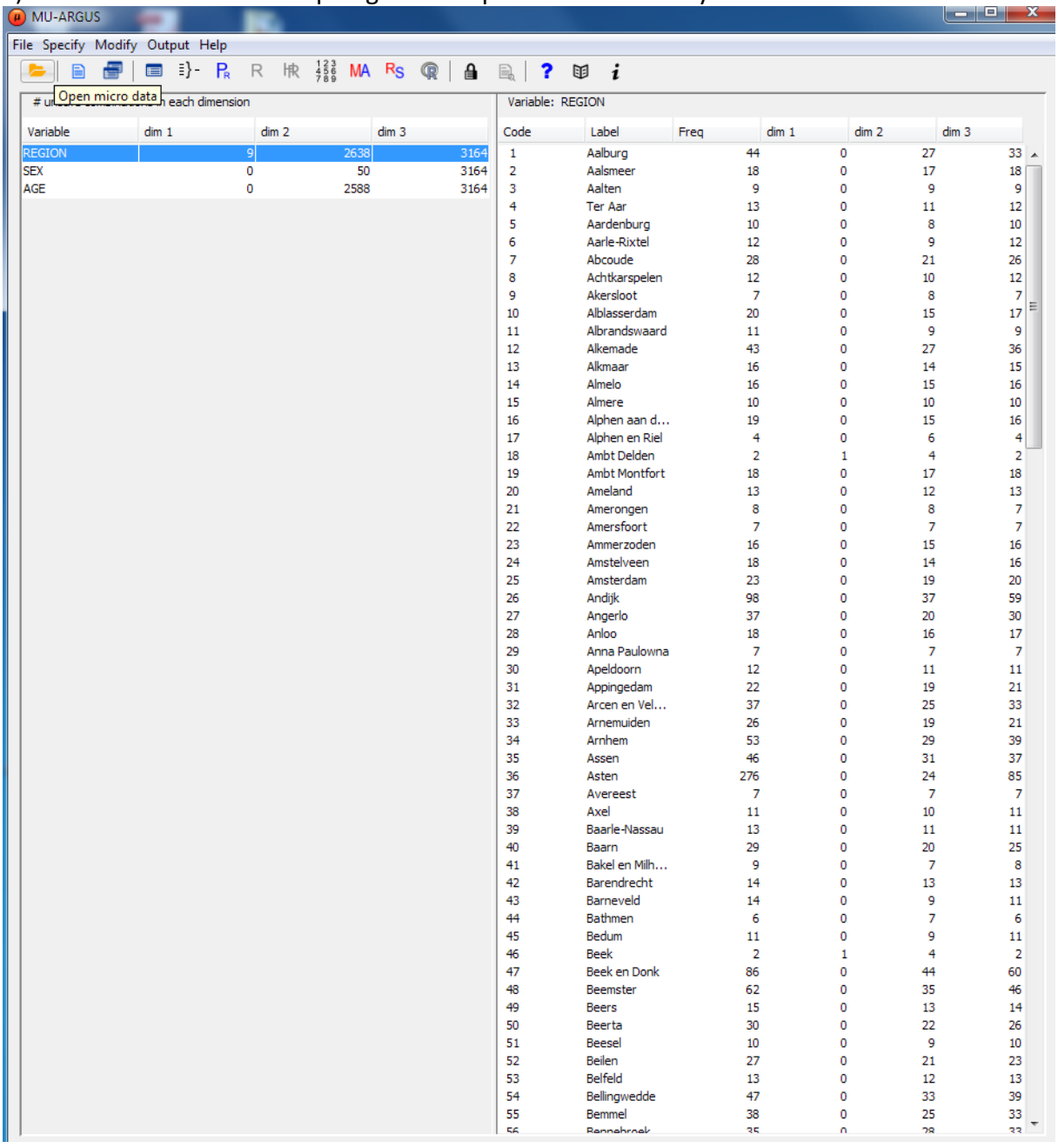
a) Open µ-Argus. Open microdata. Select Demotada.asc in the data folder where you unzipped µ-Argus. The .rda file is also in this folder and it is detected automatically by µ-Argus.



b) Use the Specify Combinations icon. Select the 3 variables Region Sex and Age and choose the threshold k=3.



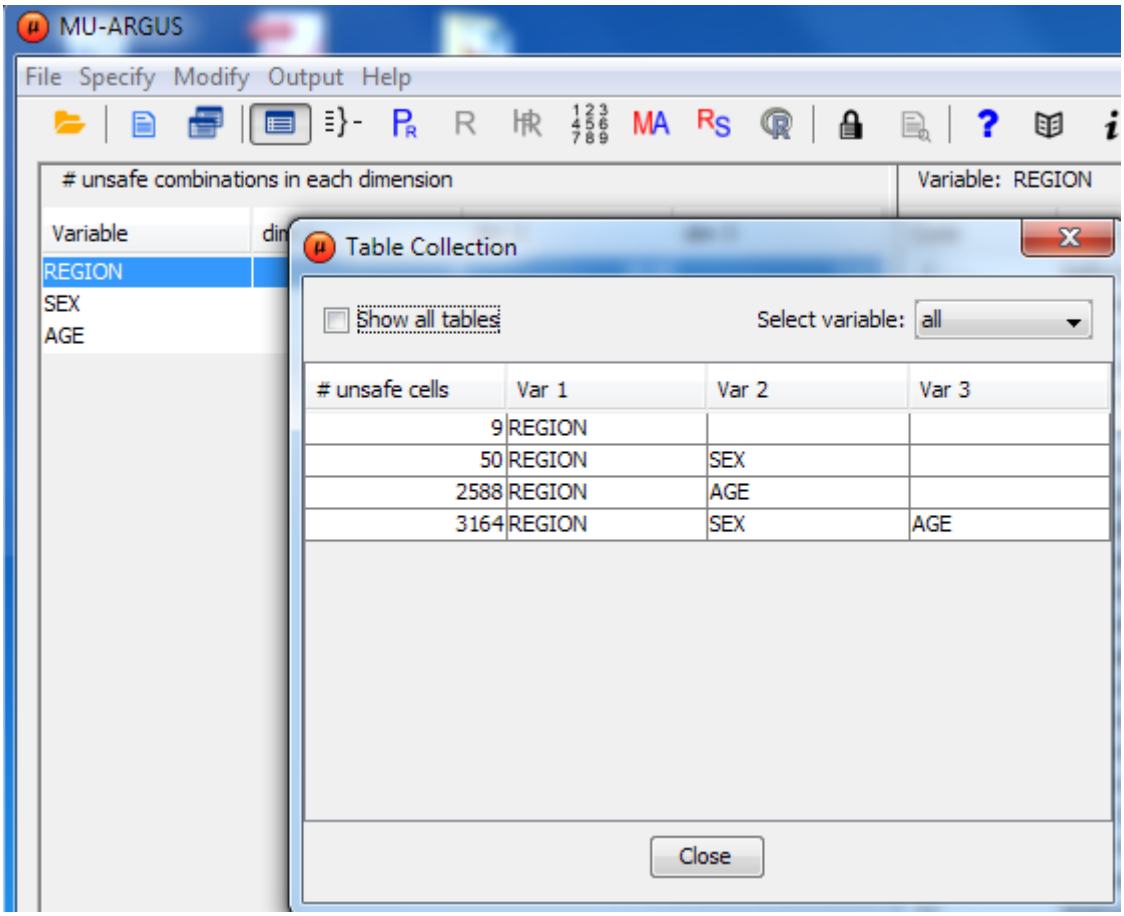
c) Click on Calculate tables. µ-Argus will explore the data and you will arrive on this screen :



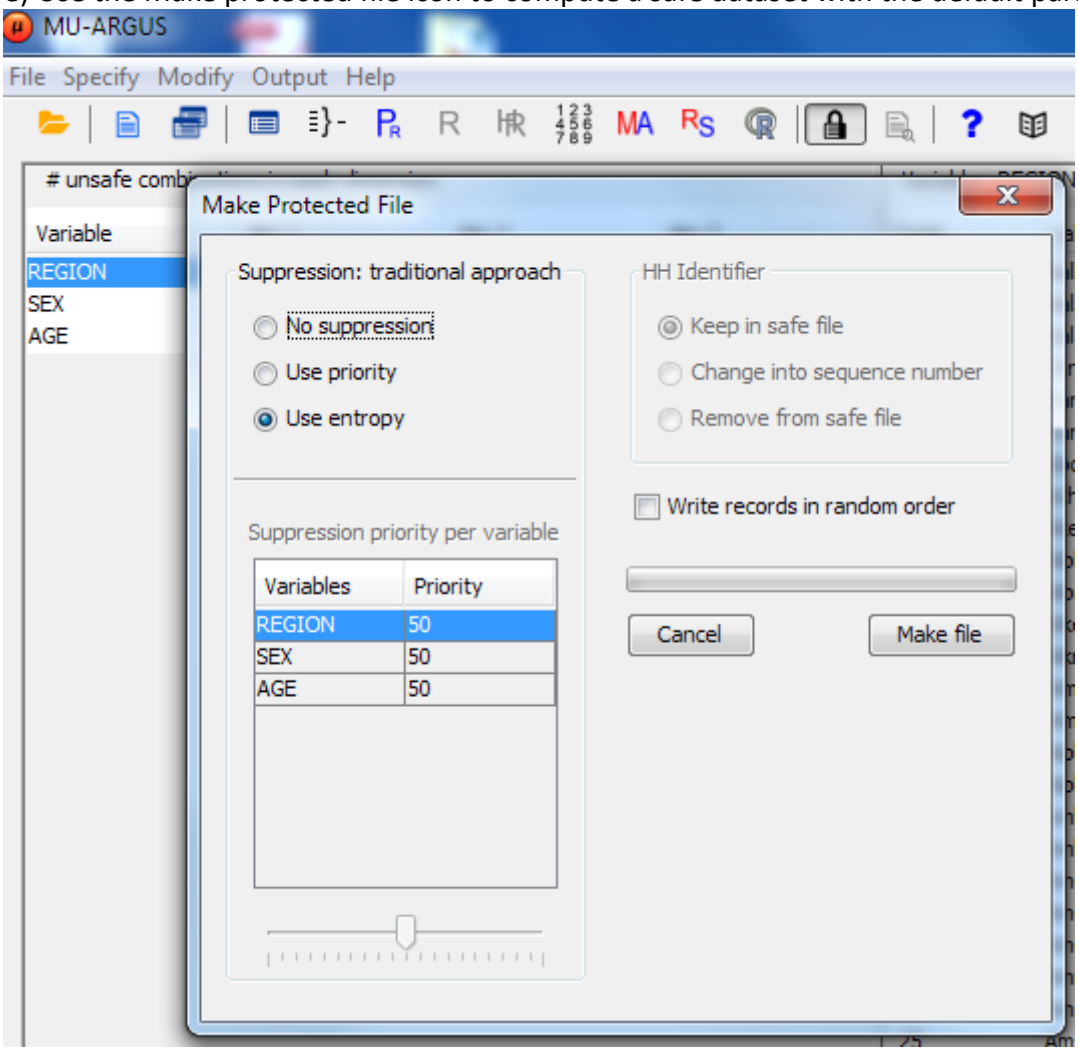
Variable	dim 1	dim 2	dim 3
REGION	9	2638	3164
SEX	0	50	3164
AGE	0	2588	3164

Code	Label	Freq	dim 1	dim 2	dim 3
1	Aalburg	44	0	27	33
2	Aalsmeer	18	0	17	18
3	Aalten	9	0	9	9
4	Ter Aar	13	0	11	12
5	Aardenburg	10	0	8	10
6	Aarle-Rixtel	12	0	9	12
7	Abcoude	28	0	21	26
8	Achtkarspelen	12	0	10	12
9	Akersloot	7	0	8	7
10	Alblasserdam	20	0	15	17
11	Albrandswaard	11	0	9	9
12	Alkemade	43	0	27	36
13	Alkmaar	16	0	14	15
14	Almelo	16	0	15	16
15	Almere	10	0	10	10
16	Alphen aan d...	19	0	15	16
17	Alphen en Riel	4	0	6	4
18	Ambt Delden	2	1	4	2
19	Ambt Montfort	18	0	17	18
20	Ameland	13	0	12	13
21	Amerongen	8	0	8	7
22	Amersfoort	7	0	7	7
23	Ammerzoden	16	0	15	16
24	Amstelveen	18	0	14	16
25	Amsterdam	23	0	19	20
26	Andijk	98	0	37	59
27	Angerlo	37	0	20	30
28	Anloo	18	0	16	17
29	Anna Paulowna	7	0	7	7
30	Apeldoorn	12	0	11	11
31	Appingedam	22	0	19	21
32	Arcen en Vel...	37	0	25	33
33	Arnemuiden	26	0	19	21
34	Arnhem	53	0	29	39
35	Assen	46	0	31	37
36	Asten	276	0	24	85
37	Avereest	7	0	7	7
38	Axel	11	0	10	11
39	Baarle-Nassau	13	0	11	11
40	Baarn	29	0	20	25
41	Bakel en Milh...	9	0	7	8
42	Barendrecht	14	0	13	13
43	Barneveld	14	0	9	11
44	Bathmen	6	0	7	6
45	Bedum	11	0	9	11
46	Beek	2	1	4	2
47	Beek en Donk	86	0	44	60
48	Beemster	62	0	35	46
49	Beers	15	0	13	14
50	Beerta	30	0	22	26
51	Beesel	10	0	9	10
52	Beilen	27	0	21	23
53	Belfeld	13	0	12	13
54	Bellingwedde	47	0	33	39
55	Bemmel	38	0	25	33

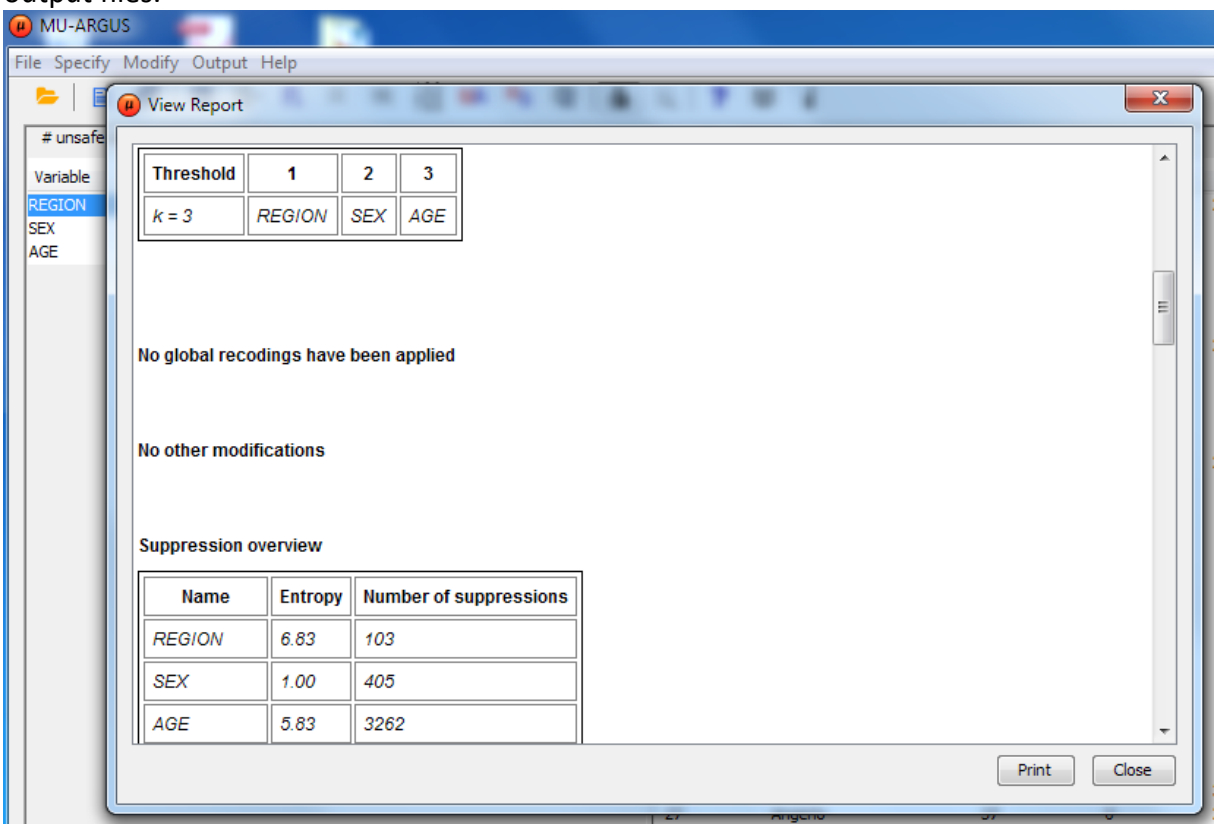
d) Click on the Table Collection icon to check how many cells are unsafe. Verify that you get the same numbers :



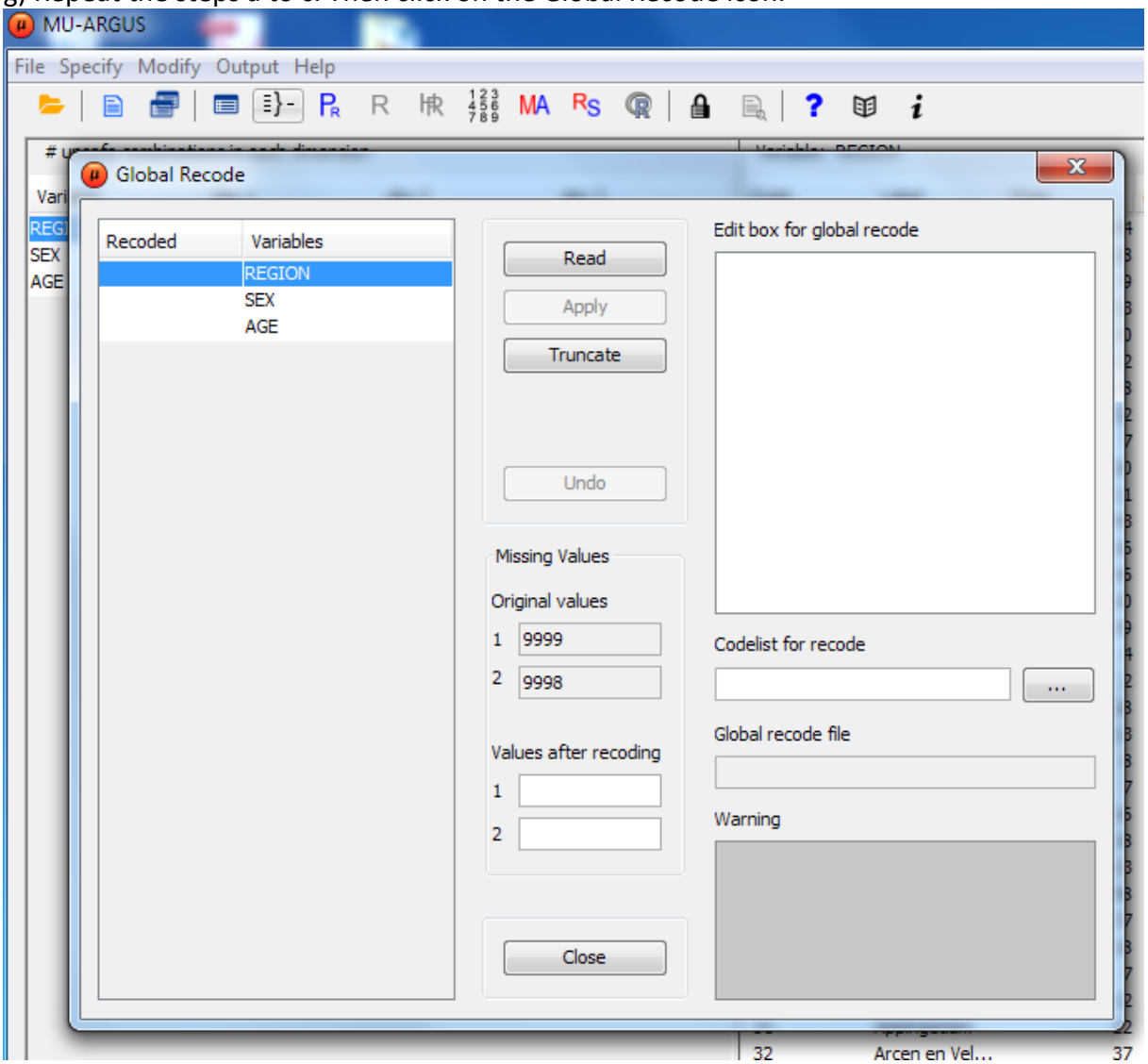
e) Use the Make protected file icon to compute a safe dataset with the default parameters.



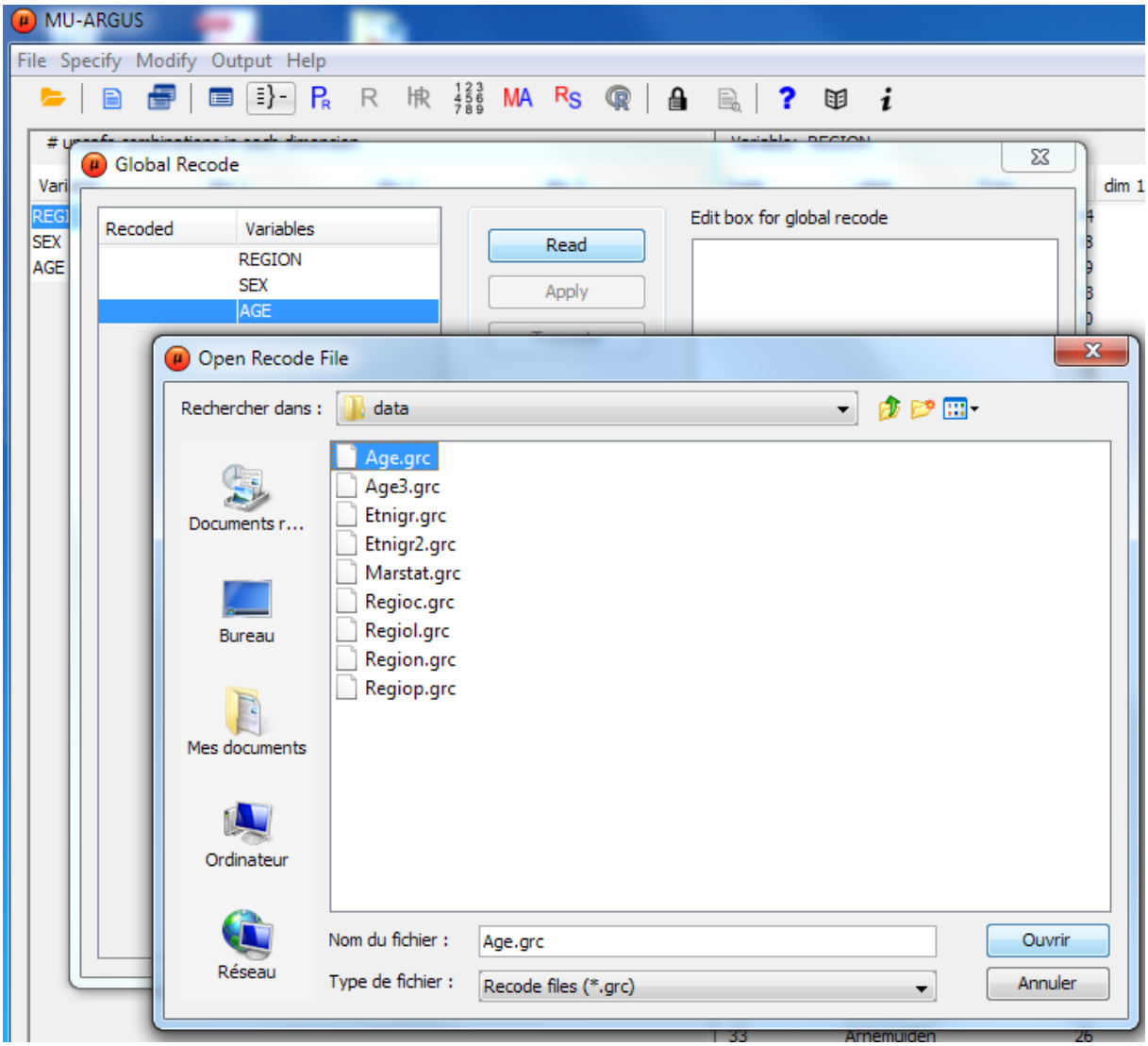
f) µ-Argus will show this report and save it as a .html file. Verify that you get the same number of suppressions by Region Sex and Age. Verify that you also get the two other output files.



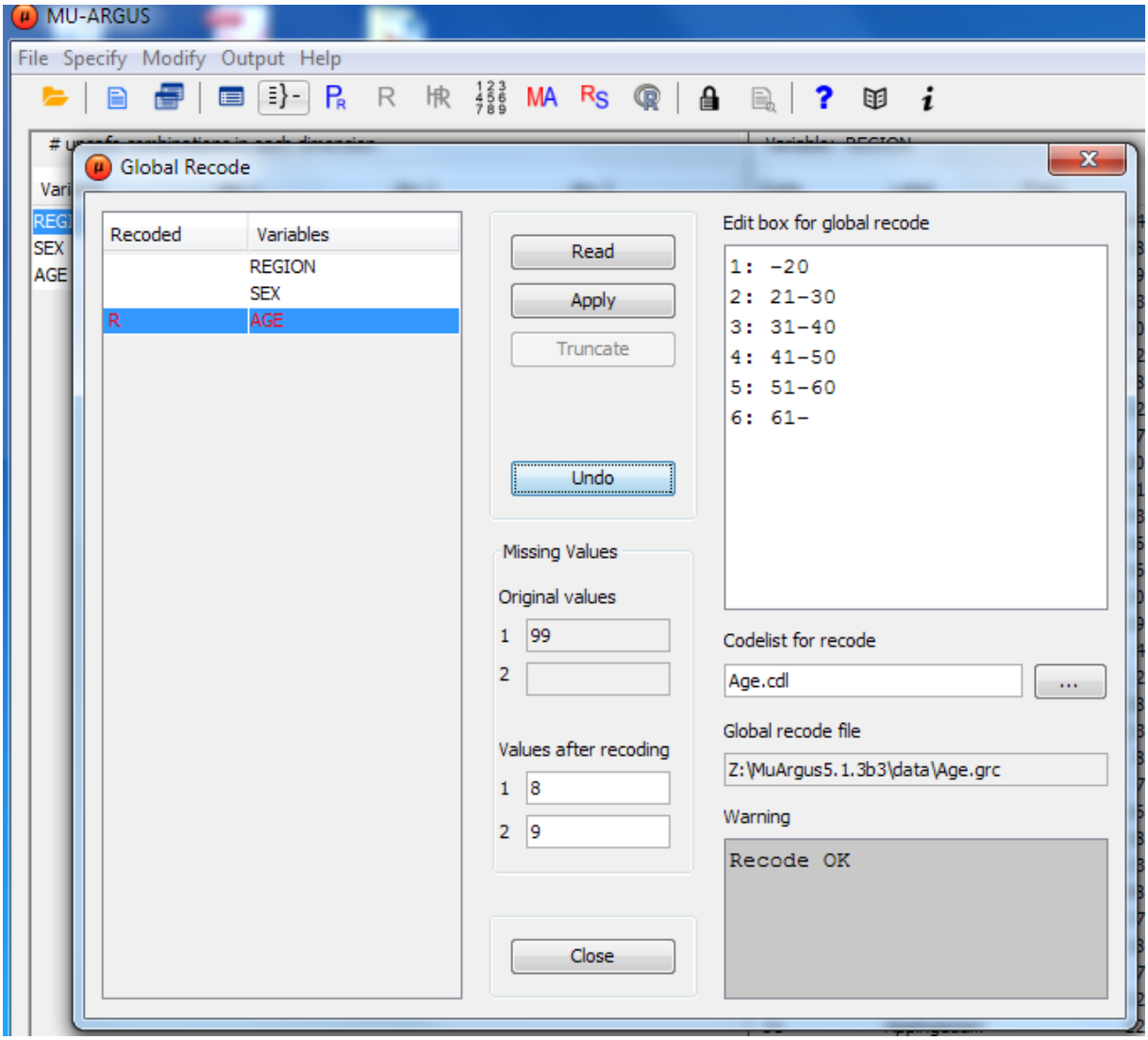
g) Repeat the steps a to c. Then click on the Global Recode icon.



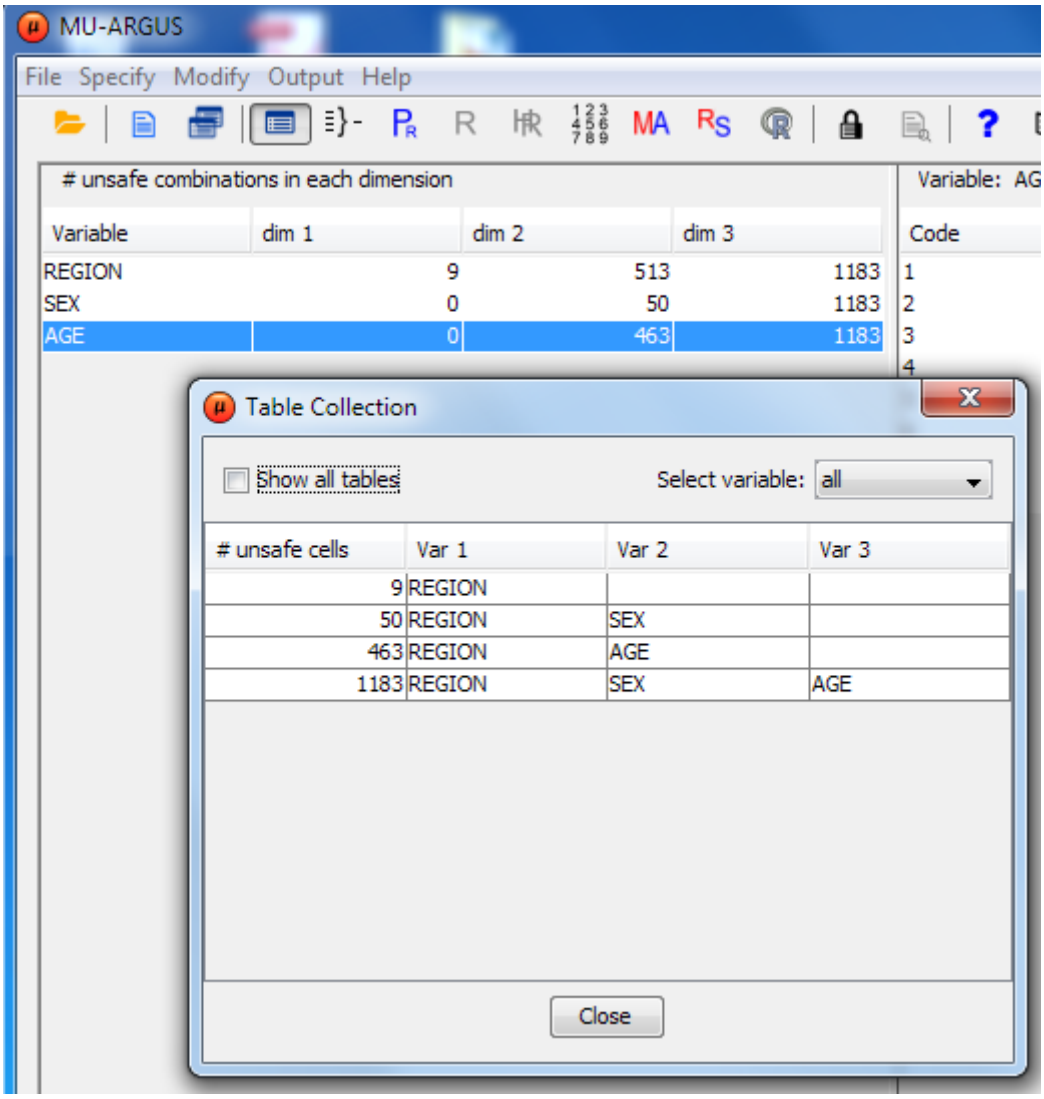
h) Select variable Age, and click ‘Read’ to select the recode file Age.grc that is in the data folder.



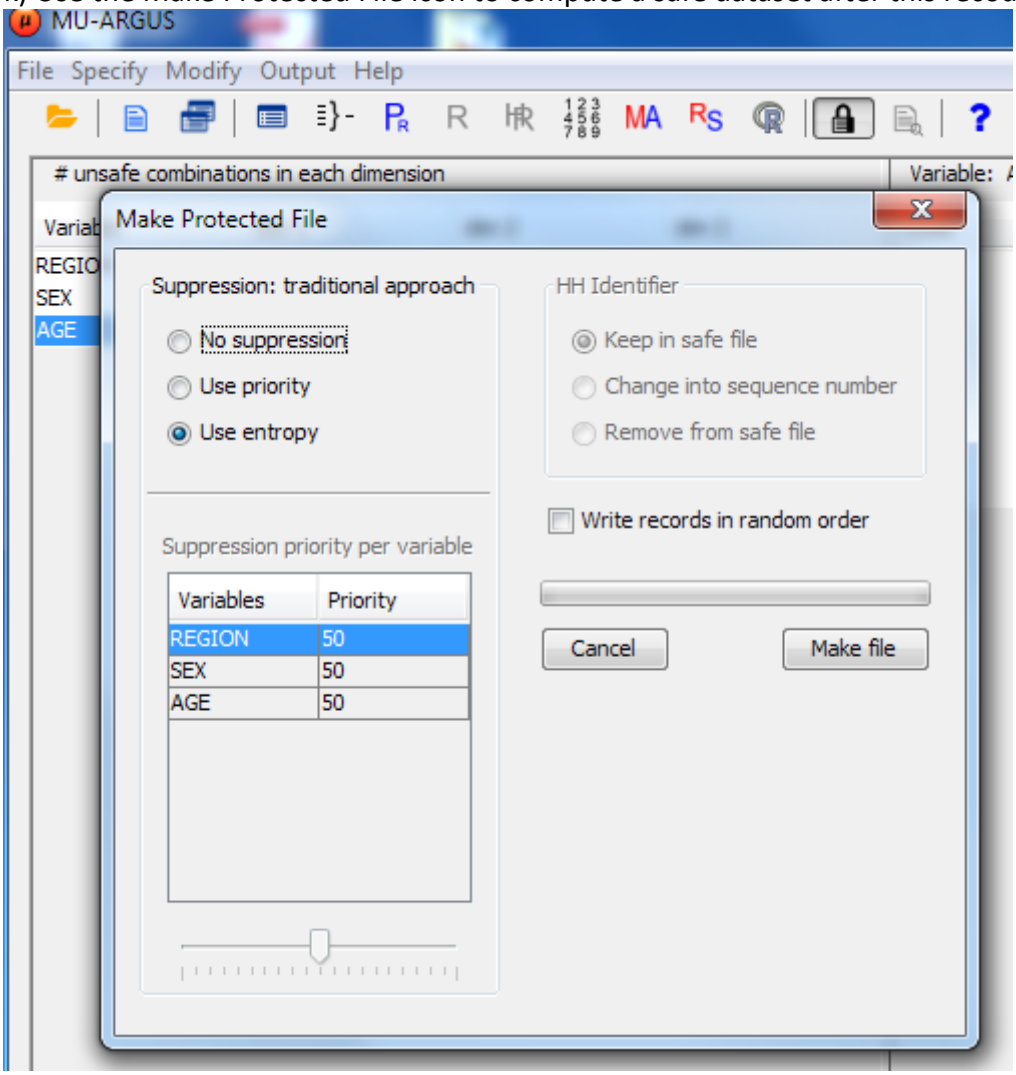
i) Apply the recoding. Verify that the variable Age goes to red and that a “R” appears in the Recoded column.



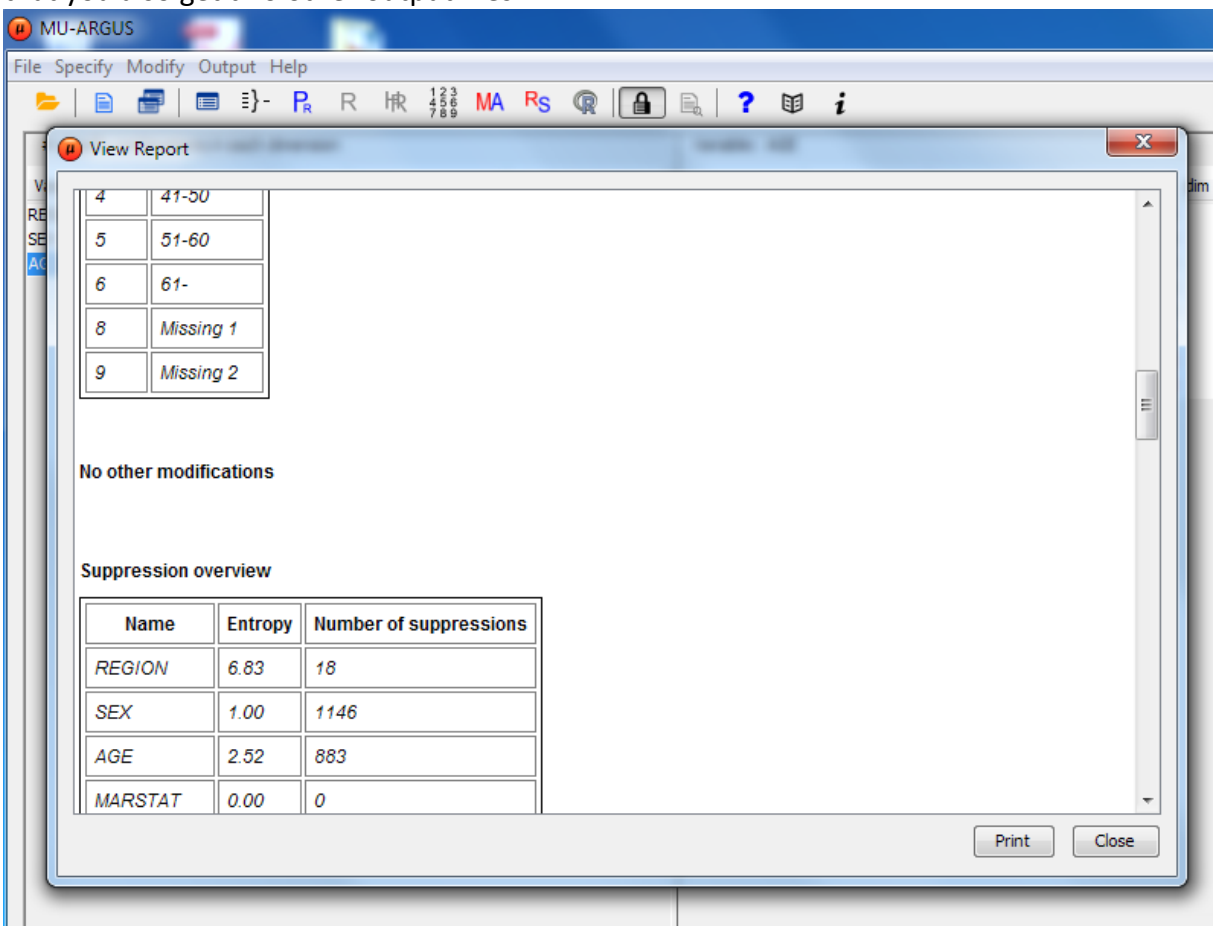
j) Click on the Table Collection icon to check the numbers of unsafe cells. Verify that you get these results :



k) Use the Make Protected File icon to compute a safe dataset after this recoding by age.



l) Verify in the report that you get the same number of suppressions for each variable. And that you also get two other output files.




DemodataSafe2.saf


DemodataSafe2.html


DemodataSafe2.rds