Missing row example

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```
library("MASS")
close = read.table("fake-pop-close-match.dat", header = T)
close.missing = read.table("fake-pop-close-match-missing-row.dat", header = T)
close.zeroed = read.table("fake-pop-close-match-zeroed-row.dat", header = T)
close
##
     yob sex age died source
                           freq
## 1 1990 m 0 no in 900.00
## 2
    1990 m 0 yes
                     in 100.00
## 3 1990 m 1 no
                      in 891.00
## 4 1990 m 1 yes
                     in 9.00
## 5 1990 m 2 no
                      in 882.09
## 6 1990 m 2 yes
                      in 8.91
## 7 1990 f 0 no
                      in 500.00
## 8 1990 f 0 yes
                     in 500.00
## 9 1990 f 1 no
                      in 495.00
## 10 1990 f 1 yes
                      in 5.00
## 11 1990 f 2 no
                     in 490.05
## 12 1990 f 2 yes
                      in 4.95
## 13 1990
         m 0 no
                      sim 901.00
                    sim 99.00
## 14 1990
         m 0 yes
## 15 1990
         m 1 no sim 890.00
         m 1 yes sim 10.00
## 16 1990
## 17 1990
         m 2 no
                      sim 882.00
## 18 1990
                      sim 9.00
         m 2 yes
## 19 1990
         f 0 no
                      sim 501.00
## 20 1990 f 0 yes sim 499.00
## 21 1990 f 1 no
                      sim 494.00
## 22 1990
         f 1 yes
                      sim 6.00
## 23 1990 f 2 no
                      sim 491.00
## 24 1990 f 2 yes
                      sim 4.00
tail(close.missing)
##
     yob sex age died source freq
## 18 1990 m 2 yes
## 19 1990 f 0 no
                      sim 501
## 20 1990 f 0 yes
                    sim 499
## 21 1990 f 1 no sim 494
## 22 1990 f 1 yes sim
## 23 1990 f 2 no sim 491
tail(close.zeroed)
##
     yob sex age died source freq
## 19 1990 f 0 no
                      sim 501
## 20 1990 f 0 yes
                      sim 499
## 21 1990 f 1 no
                      sim 494
## 22 1990 f 1 yes
                      sim
                          6
## 23 1990 f 2 no
                      sim 491
## 24 1990 f 2 yes
                      sim
```

```
dT <- close
model.sat = loglm(freq ~ yob * age * sex * died * source, data = dT)
model.step.result = step(model.sat, direction = "backward")
model.sel = eval(parse(text=model.step.result["call"]))
dT <- close.missing
model2.sat = loglm(freq ~ yob * age * sex * died * source, data = dT)
model2.step.result = step(model2.sat, direction = "backward")
model2.sel = eval(parse(text=model2.step.result["call"]))
dT <- close.zeroed
model3.sat = loglm(freq ~ yob * age * sex * died * source, data = dT)
model3.step.result = step(model3.sat, direction = "backward")
model3.sel = eval(parse(text=model3.step.result["call"]))
model.sel
## Call:
## loglm(formula = freq ~ age + sex + died + age:sex + age:died +
       sex:died + age:sex:died, data = dT, evaluate = FALSE)
##
## Statistics:
##
                         X^2 df P(> X^2)
## Likelihood Ratio 0.2552486 12
## Pearson
            0.2549084 12
model2.sel
## Call:
## loglm(formula = freq ~ age + sex + died + age:sex + age:died +
       sex:died + age:sex:died, data = dT, evaluate = FALSE)
##
##
## Statistics:
                          X^2 df P(> X^2)
## Likelihood Ratio 0.1542204 11
## Pearson
            0.1540704 11
model3.sel
## Call:
## loglm(formula = freq ~ age + sex + died + source + age:sex +
##
       age:died + sex:died + age:source + sex:source + died:source +
##
       age:sex:died + age:sex:source + age:died:source + sex:died:source +
##
       age:sex:died:source, data = dT, evaluate = FALSE)
##
## Statistics:
                   X^2 df P(> X^2)
## Likelihood Ratio 0 0
                                 1
## Pearson
                  NaN O
```