

Smacof Speedup

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Timing new smacof

```
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/rcode/smacofR.R")
dyn.load("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/ccode/smacofEngine.dll")
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/rcode/smacofRC.R")
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/rcode/trianToSDC.R")
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/timing/timer.R")
```

```
library("microbenchmark")
print("EKMAN", quote = FALSE)
```

```
## [1] EKMAN
```

```
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/data/ekman.R")
timer(ekmanR, ekmanRC)
```

```
## *****
## R   itel   32 0.005512405967979
## RC  itel   32 0.005512405967979
##
## R median time  4141252 R median time  346801 R/RC ratio  11.9412905384
## *****
```

```
print("MORSE", quote = FALSE)
```

```
## [1] MORSE
```

```
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/data/morse.R")
timer(morseR, morseRC)
```

```
## *****
## R   itel   859 0.176067994830412
## RC  itel   653 0.044974600682946
##
## R median time  166962751 R median time  14104001 R/RC ratio  11.8379707290
## *****
```

```
print("AIRLINE", quote = FALSE)
```

```
## [1] AIRLINE
```

```
source("C:/Graffiel/R/MDS/mdsStruct-main/mdsStruct-main/data/airline.R")
timer(airlineR, airlineRC)
```

```
## *****
## R   itel   309 0.009889936720254
```

```

## RC itel    309 0.009889936720254
##
## R median time  28522751 R median time  1587351 R/RC ratio   17.9687791071
## *****

print("WISH", quote = FALSE)

## [1] WISH

source("C:/Graffel/R/MDS/mdsStruct-main/mdsStruct-main/data/wish.R")
timer(wishR, wishRC)

## *****
## R    itel    438 0.029063762467695
## RC itel    438 0.029063762467695
##
## R median time  34229702 R median time  937501 R/RC ratio   36.5116426542
## *****

print("GRUIJTER", quote = FALSE)

## [1] GRUIJTER

source("C:/Graffel/R/MDS/mdsStruct-main/mdsStruct-main/data/gruijter.R")
timer(gruijterR, gruijterRC)

## *****
## R    itel    1151 0.022301691293285
## RC itel    1151 0.022301691293285
##
## R median time  87329900 R median time  1359101 R/RC ratio   64.2556602694
## *****

print("EQDIST", quote = FALSE)

## [1] EQDIST

source("C:/Graffel/R/MDS/mdsStruct-main/mdsStruct-main/data/eqdist.R")
timer(eqdistR, eqdistRC)

## *****
## R    itel    10000 0.065534638209008
## RC itel    10000      NaN
##
## R median time  868258351 R median time  26972551 R/RC ratio   32.1904430580
## *****

```