Bats and human blood project: median cell sizes

prepare

```
pathWD <- "~/Documents/08_Pojekte/01_dRT-DC/220301_Bob_DataAnalysis_BatsHumans/20230829_AnimalTypeTempS
setwd(pathWD)
```

load data space image

```
load(file.path(pathWD, paste0("RDataSpace_v8", ".RData")))
```

find meadian cell sizes and corresponding cells

```
for (iter.AnimalType in levels.AnimalType) {
  print(paste0("Species = ", iter.AnimalType, ":"))
  tbl.AnimalType <- combTable[combTable$animalType == iter.AnimalType, ]
  medianArea <- median(tbl.AnimalType$area)
  print(paste0("Median cell size = ", medianArea, " um^2"))
  print("Cells:")
  tbl.medAreaCells <- tbl.AnimalType[tbl.AnimalType$area == medianArea, c("dateCode","tempLevel","measNu
  print(tbl.medAreaCells)
  write.csv(tbl.medAreaCells, file.path(pathWD, paste0("tbl", "_medianArea", iter.AnimalType, ".csv")),
  print("")
}
```

```
## [1] "Species = Human:"
## [1] "Median cell size = 36.5585 um^2"
## [1] "Cells:"
## # A tibble: 141 x 12
##    dateCode tempLevel measNum cellNum  area velocity  tau1  tau2 deltaDefoTau1
##       <dbl> <fct>       <dbl>   <dbl> <dbl>    <dbl> <dbl> <dbl>         <dbl>
##  1   191108 Cold            2     109  36.6     4.15  4.94 0.883         0.135
##  2   191108 Cold            2     948  36.6     4.01  4.43 1.87          0.159
##  3   191108 Cold            3    1275  36.6     3.93 10.5  1.99          0.171
##  4   191108 Cold            4     572  36.6     3.85  9.77 4.08          0.217
##  5   191108 Cold            4     985  36.6     3.82  5.69 1.81          0.185
##  6   191108 Cold            5     250  36.6     3.84 10.8  2.66          0.252
##  7   191108 Cold            6     181  36.6     3.86  4.09 0.877         0.172
##  8   191108 Cold            6     984  36.6     3.89  9.41 1.13          0.241
##  9   191108 RT              2     255  36.6     4.23  7.31 1.12          0.222
## 10   191108 RT              2    1117  36.6     4.17  7.82 0.864         0.238
## # i 131 more rows
## # i 3 more variables: deltaDefoTau2 <dbl>, eModulus <dbl>, viscosity <dbl>
## [1] ""
## [1] "Species = RousettusAegyptiacus:"
```

```
## [1] "Median cell size = 21.2704 um^2"
## [1] "Cells:"
## # A tibble: 1,281 x 12
##    dateCode tempLevel measNum cellNum  area velocity   tau1  tau2 deltaDefoTau1
##       <dbl> <fct>       <dbl>   <dbl> <dbl>    <dbl>  <dbl> <dbl>         <dbl>
##  1   210812 Cold            1     314  21.3     3.74   4.15  2.37         0.118
##  2   210812 Cold            1     427  21.3     3.75   4.36  5.03         0.134
##  3   210812 Cold            1     503  21.3     3.75   4.67  1.71         0.137
##  4   210812 Cold            1     554  21.3     3.74   7.21  1.54         0.182
##  5   210812 Cold            1     778  21.3     3.75   3.33  1.69         0.126
##  6   210812 Cold            1     843  21.3     3.76   3.78  3.15         0.135
##  7   210812 Cold            1    2811  21.3     3.72 NaN     2.35       NaN
##  8   210812 Cold            1    3047  21.3     3.71   6.97  3.12         0.196
##  9   210812 Cold            1    3274  21.3     3.72   5.21  3.51         0.157
## 10   210812 Cold            1    3638  21.3     3.74   4.42  3.33         0.155
## # i 1,271 more rows
## # i 3 more variables: deltaDefoTau2 <dbl>, eModulus <dbl>, viscosity <dbl>
## [1] ""
## [1] "Species = NyctalusNoctula:"
## [1] "Median cell size = 19.3341 um^2"
## [1] "Cells:"
## # A tibble: 1,061 x 12
##    dateCode tempLevel measNum cellNum  area velocity   tau1   tau2 deltaDefoTau1
##       <dbl> <fct>       <dbl>   <dbl> <dbl>    <dbl>  <dbl>  <dbl>         <dbl>
##  1   191015 Cold            2     778  19.3     4.07 NaN      4.17      NaN
##  2   191015 Cold            4      89  19.3     3.85   2.03 NaN           0.0619
##  3   191015 Cold            5     127  19.3     4.00   2.27 NaN           0.0729
##  4   191015 Cold            6     646  19.3     3.88   8.26 NaN           0.164
##  5   191015 Cold            7     155  19.3     3.93 NaN      4.00      NaN
##  6   191015 Cold           10      95  19.3     3.94  10.5    1.85        0.243
##  7   191015 Cold           10     263  19.3     3.96   6.58   2.61        0.192
##  8   191015 Cold           10     267  19.3     3.96 NaN      1.92      NaN
##  9   191015 RT              3     228  19.3     4.30 NaN      5.99      NaN
## 10   191015 RT              3     517  19.3     4.27   2.95 NaN           0.142
## # i 1,051 more rows
## # i 3 more variables: deltaDefoTau2 <dbl>, eModulus <dbl>, viscosity <dbl>
## [1] ""
```

```
rm(tbl.AnimalType,medianArea)
```