

test

Sarah Altemeier

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```
library(readxl)
library(zoo)
```

```
##
## Attaching package: 'zoo'

## The following objects are masked from 'package:base':
##
##      as.Date, as.Date.numeric
```

```
library(ActCR)
getwd()
```

```
## [1] "C:/Users/smalt/OneDrive - University of Iowa/Desktop/xlsxFiles"
```

```
## dir()
```

```
file.list <- list.files(pattern='*.xlsx')
filenames <- c(file.list)
```

```
for (file in filenames)
{
```

```
  print(file)
  ## It is important to let R know that in your spreadsheet, NA represents missing
  dat = read_xlsx(file, na = "NaN")
```

```
  ## Get only the activity counts
  act_dat = dat[,c(3:1442)]
```

```
  ## You can simply throw away rows with all NAs
  act_dat = act_dat[rowSums(!is.na(act_dat)) > 0, ]
```

```
  x = c(t(act_dat))
  act_cr_coef = ActCosinor(x, window = 1)
  print("Act_Cr_Coef")
  print(act_cr_coef)
```

```
  act_extend_cr_coef = ActExtendCosinor(x, window = 1, lower = c(0, 0, -1, 0, -3), upper = c(Inf, Inf, 1
  print("Act_Extend_Cr_Coef")
  print(act_extend_cr_coef)
```

```
}
```

```

## [1] "EI_1_19_Circadian_Summary_13_8.xlsx"
## [1] "Act_Cr_Coef"
## $mes
## [1] 244.6379
##
## $amp
## [1] 175.3114
##
## $acr
## [1] -4.37914
##
## $acrotime
## [1] 16.72708
##
## $ndays
## [1] 8
##
## [1] "Act_Extend_Cr_Coef"
## $minimum
## [1] 69.32649
##
## $amp
## [1] 350.6227
##
## $alpha
## [1] 0
##
## $beta
## [1] 2
##
## $acrotime
## [1] 16.72708
##
## $F_pseudo
## [1] NA
##
## $UpMesor
## [1] 10.72708
##
## $DownMesor
## [1] 22.72708
##
## $MESOR
## [1] 244.6379
##
## $ndays
## [1] 8
##
## [1] "RL_Test_1_19_Circadian_Summary_13_8.xlsx"
## [1] "Act_Cr_Coef"
## $mes
## [1] 109.1749
##
## $amp

```

```

## [1] 100.9003
##
## $acr
## [1] -4.075427
##
## $acrotime
## [1] 15.56698
##
## $ndays
## [1] 9
##
## [1] "Act_Extend_Cr_Coef"
## $minimum
## [1] 8.274522
##
## $amp
## [1] 201.8007
##
## $alpha
## [1] 0
##
## $beta
## [1] 2
##
## $acrotime
## [1] 15.56698
##
## $F_pseudo
## [1] NA
##
## $UpMesor
## [1] 9.566985
##
## $DownMesor
## [1] 21.56698
##
## $MESOR
## [1] 109.1749
##
## $ndays
## [1] 9

```