enaR package review 2020

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Install Review Dependencies

```r
## Check for supporting packages
cran.pkgs <- c("foghorn", "usethis", "goodpractice", "devtools")
## install packages that are not installed
## CRAN
if (any(!(cran.pkgs %in% installed.packages()[, 1]))){
    sapply(cran.pkgs[which(!(cran.pkgs %in%
                             installed.packages()[, 1]))],
           install.packages,
           dependencies = TRUE,
           repos = 'http://cran.us.r-project.org')
}
## Load libraries
sapply(cran.pkgs, library, quietly = TRUE, character.only = TRUE)
```

```
##       foghorn        usethis        goodpractice   devtools
##  [1,] "enaR"         "enaR"         "enaR"         "enaR"
##  [2,] "goodpractice" "goodpractice" "goodpractice" "goodpractice"
##  [3,] "devtools"     "devtools"     "devtools"     "devtools"
##  [4,] "usethis"      "usethis"      "usethis"      "usethis"
##  [5,] "foghorn"      "foghorn"      "foghorn"      "foghorn"
##  [6,] "stats"        "stats"        "stats"        "stats"
##  [7,] "graphics"     "graphics"     "graphics"     "graphics"
##  [8,] "grDevices"    "grDevices"    "grDevices"    "grDevices"
##  [9,] "utils"        "utils"        "utils"        "utils"
## [10,] "datasets"     "datasets"     "datasets"     "datasets"
## [11,] "methods"      "methods"      "methods"      "methods"
## [12,] "base"         "base"         "base"         "base"
```

CRAN Review

```r
devtools::check()
```

```
## Updating enaR documentation
```

```
## Loading enaR
```

```
## Writing NAMESPACE
## Writing NAMESPACE
## -- Building ------------------------------------------------------------ enaR --
## Setting env vars:
```

```
## * CFLAGS    : -Wall -pedantic
## * CXXFLAGS  : -Wall -pedantic
## * CXX11FLAGS: -Wall -pedantic
## --------------------------------------------------------------------------------
##      checking for file '/Users/hermes/workroom/enar/DESCRIPTION' ...  v  checking for file '/Users/h
##   -  preparing 'enaR': (491ms)
##      checking DESCRIPTION meta-information ...  v  checking DESCRIPTION meta-information
##   -  installing the package to build vignettes (383ms)
##      creating vignettes ...  v  creating vignettes (12.1s)
##   -  checking for LF line-endings in source and make files and shell scripts
##   -  checking for empty or unneeded directories
##   -  looking to see if a 'data/datalist' file should be added
##   -  building 'enaR_3.0.4.tar.gz'
##
## -- Checking ------------------------------------------------------------ enaR --
## Setting env vars:
## * _R_CHECK_CRAN_INCOMING_USE_ASPELL_: TRUE
## * _R_CHECK_CRAN_INCOMING_REMOTE_    : FALSE
## * _R_CHECK_CRAN_INCOMING_           : FALSE
## * _R_CHECK_FORCE_SUGGESTS_          : FALSE
## * NOT_CRAN                          : true
## <U+2500><U+2500> R CMD check <U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500>
## -\  -  using log directory '/private/var/folders/7x/4c5fkmrx5r54d6sgzglyffth0000gn/T/RtmpGpcEiM/enaR
## |  -  using R version 4.0.2 (2020-06-22)
## -  using platform: x86_64-apple-darwin17.0 (64-bit)
## -  using session charset: ASCII
## /-  -  using options '--no-manual --as-cran' (384ms)
## \  v  checking for file 'enaR/DESCRIPTION'
## -  checking extension type ... Package
## -  this is package 'enaR' version '3.0.4'
## -  package encoding: UTF-8
##    checking package namespace information ...|  v  checking package namespace information
##    checking package dependencies .../-\|/-\|/-\|/-\|/-  v  checking package dependencies (3.6s)
## \  v  checking if this is a source package
## v  checking if there is a namespace
## |     checking for executable files .../-\|/-\|  v  checking for executable files (1.6s)
## /  v  checking for hidden files and directories
##    checking for portable file names ...-  v  checking for portable file names
## \  v  checking for sufficient/correct file permissions
## |     checking serialization versions .../  v  checking serialization versions
## -     checking whether package 'enaR' can be installed ...\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|
## |     checking installed package size .../  v  checking installed package size
## -     checking package directory ...\  v  checking package directory
##    checking for future file timestamps ...|/-\  N  checking for future file timestamps (694ms)
##    unable to verify current time
##    checking 'build' directory ...|  v  checking 'build' directory
##    checking DESCRIPTION meta-information .../-  v  checking DESCRIPTION meta-information (393ms)
## \  v  checking top-level files
## v  checking for left-over files
##    checking index information ...|/-\  v  checking index information (748ms)
## |     checking package subdirectories .../-\|/  v  checking package subdirectories (884ms)
## -     checking R files for non-ASCII characters ...\  v  checking R files for non-ASCII characters
## |     checking R files for syntax errors .../  v  checking R files for syntax errors
## -     checking whether the package can be loaded ...\|/-\  v  checking whether the package can be lo
## |     checking whether the package can be loaded with stated dependencies .../-\|/  v  checking wheth
## -     checking whether the package can be unloaded cleanly ...\|/-\  v  checking whether the package
## |     checking whether the namespace can be loaded with stated dependencies .../-\|/  v  checking whe
## -     checking whether the namespace can be unloaded cleanly ...\|/-\  v  checking whether the namesp
## |     checking dependencies in R code .../-\|/-\|  v  checking dependencies in R code (1.5s)
## /     checking S3 generic/method consistency ...-\|/-\|/-\|/-\  W  checking S3 generic/method consis
## |     plot:
##      function(x, ...)
##    plot.lindeman:
##      function(x, enatroagg, primprod, type)
##
##    See section 'Generic functions and methods' in the 'Writing R
##    Extensions' manual.
##
##    Found the following apparent S3 methods exported but not registered:
##      plot.lindeman
##    See section 'Registering S3 methods' in the 'Writing R Extensions'
##    manual.
##    checking replacement functions .../-\|/  v  checking replacement functions (1s)
## -     checking foreign function calls ...\|/-\|/-\  v  checking foreign function calls (1.7s)
## |     checking R code for possible problems .../-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/
## /     checking Rd files ...-\|/-  v  checking Rd files (884ms)
## \     checking Rd metadata ...|  v  checking Rd metadata
## /     checking Rd line widths ...-\  v  checking Rd line widths (361ms)
## |     checking Rd cross-references .../-  v  checking Rd cross-references (396ms)
## \     checking for missing documentation entries ...|/-\|/-\  v  checking for missing documentation
## |     checking for code/documentation mismatches .../-\|/-\|/-\|/-\|/-\  v  checking for code/documen
## |     checking Rd \usage sections .../-\|/-\|/-\|/-\|/  v  checking Rd \usage sections (3.4s)
## -     checking Rd contents ...\|  v  checking Rd contents (414ms)
## /     checking for unstated dependencies in examples ...-\|  v  checking for unstated dependencies i
## /     checking contents of 'data' directory ...-\|/-\|/-\|/-\|/-\|/-\|/-\  v  checking contents of '
## |     checking data for non-ASCII characters .../-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\  v  checking dat
## |     checking data for ASCII and uncompressed saves .../-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|/-\|
##
##      Note: significantly better compression could be obtained
##            by using R CMD build --resave-data
##                    old_size new_size compress
##      bgcModels.rda     39Kb    22Kb     bzip2
##      enaModels.rda    434Kb    266Kb       xz
##    troModels.rda    392Kb    242Kb       xz-       troModels.rda    392Kb    242Kb       xz
##    checking sizes of PDF files under 'inst/doc' ...\|/-\|/-\|/-\|/-\|/-  v  checking sizes of PDF fi
## \     checking installed files from 'inst/doc' ...|  v  checking installed files from 'inst/doc'
## /     checking files in 'vignettes' ...-  v  checking files in 'vignettes'
## \     checking examples ...|/-\  W  checking examples (802ms)
## |     checking a package with encoding  'UTF-8'  in an ASCII locale
##
## /-\|/-\|/-\|/-\|/-\|/-\|/-\|/      ERROR
## Running examples in 'enaR-Ex.R'-     Running examples in 'enaR-Ex.R' failed
##    The error most likely occurred in:
##
##    > base::assign(".ptime", proc.time(), pos = "CheckExEnv")
##    > ### Name: enaAll
##    > ### Title: Conduct All Major ENA
##    > ### Aliases: enaAll
##    >
##    > ### ** Examples
##    >
##    >
##    >
##    >
##    > data(troModels)
##    > output = enaAll(troModels[[6]])
##     ----------- FAILURE REPORT --------------
##     --- failure: the condition has length > 1 ---
##     --- srcref ---
##    :
##     --- package (from environment) ---
##    enaR
##     --- call from context ---
##    structure.statistics(A)
##     --- call from argument ---
##    if (class(A) != "matrix") {
##        warning("A is not a matrix class object")
##    }
##     --- R stacktrace ---
##    where 1: structure.statistics(A)
##    where 2: enaStructure(x)
##    where 3: enaAll(troModels[[6]])
##
##     --- value of length: 2 type: logical ---
##    [1] FALSE  TRUE
##     --- function from context ---
##    function (A = "adjacency matrix")
##    {
##        if (class(A) != "matrix") {
##            warning("A is not a matrix class object")
##        }
##        n <- dim(A)[1]
##        L <- sum(A)
##        C <- L/n^2
##        LD <- L/n
##        e <- eigen(A)$values
##        aer <- round(abs(e), digits = 7)
##        mlam1A <- length(which(aer == aer[1]))
##        ppr <- sum(mExp(A, 200))/sum(mExp(A, 199))
##        lam1A <- abs(e[1])
##        d <- abs(lam1A - LD)
##        if ((n - mlam1A) > 0) {
##            lam2A <- abs(e[(1 + mlam1A)])
##            rho <- lam1A/abs(lam2A)
##            R <- abs(e[n]) - abs(e[n - 1])/(abs(e[n - 1]) - abs(e[1]))
##        }
##        else {
##            lam2A <- NA
##            rho <- NA
##            R <- NA
##        }
##        sp1 <- as.vector(scc(A)$sp)
##        no.scc <- sp1[1]
##        no.scc.big <- sp1[2]
##        pscc <- sp1[3]
##        sp <- cbind(n, L, C, LD, ppr, lam1A, mlam1A, rho, R, d, no.scc,
##            no.scc.big, pscc)
##        return(sp)
##    }
##    <bytecode: 0x7fc34fa0dd50>
##    <environment: namespace:enaR>
##     --- function search by body ---
##    Function structure.statistics in namespace enaR has this body.
##     ----------- END OF FAILURE REPORT --------------
##    Error in if (class(A) != "matrix") { : the condition has length > 1
##    Calls: enaAll -> enaStructure -> structure.statistics
##    Execution halted
## \     checking for unstated dependencies in vignettes ...|/-\  v  checking for unstated dependencies
## |  v  checking package vignettes in 'inst/doc'
## /     checking re-building of vignette outputs ...-\|/-  v  checking re-building of vignette outputs
## \  v  checking for non-standard things in the check directory
## v  checking for detritus in the temp directory
##
##    See
##      '/private/var/folders/7x/4c5fkmrx5r54d6sgzglyffth0000gn/T/RtmpGpcEiM/enaR.Rcheck/00check.log'
##    for details.
##
## |/

## <U+2500><U+2500> R CMD check results <U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500>
## Duration: 1m 41.2s
##
## > checking examples ... WARNING
##   checking a package with encoding  'UTF-8'  in an ASCII locale
##
##    ERROR
##   Running examples in 'enaR-Ex.R' failed
##   The error most likely occurred in:
##
##   > base::assign(".ptime", proc.time(), pos = "CheckExEnv")
##   > ### Name: enaAll
##   > ### Title: Conduct All Major ENA
##   > ### Aliases: enaAll
##   >
##   > ### ** Examples
##   >
##   >
##   >
##   >
##   > data(troModels)
##   > output = enaAll(troModels[[6]])
##    ----------- FAILURE REPORT --------------
##    --- failure: the condition has length > 1 ---
##    --- srcref ---
##   :
##    --- package (from environment) ---
##   enaR
##    --- call from context ---
##   structure.statistics(A)
##    --- call from argument ---
##   if (class(A) != "matrix") {
##       warning("A is not a matrix class object")
##   }
##    --- R stacktrace ---
##   where 1: structure.statistics(A)
##   where 2: enaStructure(x)
##   where 3: enaAll(troModels[[6]])
##
##    --- value of length: 2 type: logical ---
##   [1] FALSE  TRUE
##    --- function from context ---
##   function (A = "adjacency matrix")
##   {
##       if (class(A) != "matrix") {
##           warning("A is not a matrix class object")
##       }
##       n <- dim(A)[1]
##       L <- sum(A)
##       C <- L/n^2
##       LD <- L/n
##       e <- eigen(A)$values
##       aer <- round(abs(e), digits = 7)
##       mlam1A <- length(which(aer == aer[1]))
##       ppr <- sum(mExp(A, 200))/sum(mExp(A, 199))
##       lam1A <- abs(e[1])
##       d <- abs(lam1A - LD)
##       if ((n - mlam1A) > 0) {
##           lam2A <- abs(e[(1 + mlam1A)])
##           rho <- lam1A/abs(lam2A)
##           R <- abs(e[n]) - abs(e[n - 1])/(abs(e[n - 1]) - abs(e[1]))
##       }
##       else {
##           lam2A <- NA
##           rho <- NA
##           R <- NA
##       }
##       sp1 <- as.vector(scc(A)$sp)
##       no.scc <- sp1[1]
##       no.scc.big <- sp1[2]
##       pscc <- sp1[3]
##       sp <- cbind(n, L, C, LD, ppr, lam1A, mlam1A, rho, R, d, no.scc,
##           no.scc.big, pscc)
##       return(sp)
##   }
##   <bytecode: 0x7fc34fa0dd50>
##   <environment: namespace:enaR>
##    --- function search by body ---
##   Function structure.statistics in namespace enaR has this body.
##    ----------- END OF FAILURE REPORT --------------
##   Error in if (class(A) != "matrix") { : the condition has length > 1
##   Calls: enaAll -> enaStructure -> structure.statistics
##   Execution halted
##
## > checking S3 generic/method consistency ... WARNING
##   plot:
##     function(x, ...)
##   plot.lindeman:
##     function(x, enatroagg, primprod, type)
##
##   See section 'Generic functions and methods' in the 'Writing R
##   Extensions' manual.
##
##   Found the following apparent S3 methods exported but not registered:
##     plot.lindeman
##   See section 'Registering S3 methods' in the 'Writing R Extensions'
##   manual.
##
## > checking data for ASCII and uncompressed saves ... WARNING
##
##     Note: significantly better compression could be obtained
##           by using R CMD build --resave-data
##                   old_size new_size compress
##     bgcModels.rda     39Kb     22Kb    bzip2
##     enaModels.rda    434Kb    266Kb       xz
##     troModels.rda    392Kb    242Kb       xz
##
## > checking examples ... WARNING
##   checking a package with encoding  'UTF-8'  in an ASCII locale
##
##    ERROR
##   Running examples in 'enaR-Ex.R' failed
##   The error most likely occurred in:
##
##   > base::assign(".ptime", proc.time(), pos = "CheckExEnv")
##   > ### Name: enaAll
##   > ### Title: Conduct All Major ENA
##   > ### Aliases: enaAll
##   >
##   > ### ** Examples
##   >
##   >
##   >
##   >
##   > data(troModels)
##   > output = enaAll(troModels[[6]])
##    ----------- FAILURE REPORT --------------
##    --- failure: the condition has length > 1 ---
##    --- srcref ---
##   :
##    --- package (from environment) ---
##   enaR
##    --- call from context ---
##   structure.statistics(A)
##    --- call from argument ---
##   if (class(A) != "matrix") {
##       warning("A is not a matrix class object")
##   }
##    --- R stacktrace ---
##   where 1: structure.statistics(A)
##   where 2: enaStructure(x)
##   where 3: enaAll(troModels[[6]])
##
##    --- value of length: 2 type: logical ---
##   [1] FALSE  TRUE
##    --- function from context ---
##   function (A = "adjacency matrix")
##   {
##       if (class(A) != "matrix") {
##           warning("A is not a matrix class object")
##       }
##       n <- dim(A)[1]
##       L <- sum(A)
##       C <- L/n^2
##       LD <- L/n
##       e <- eigen(A)$values
##       aer <- round(abs(e), digits = 7)
##       mlam1A <- length(which(aer == aer[1]))
##       ppr <- sum(mExp(A, 200))/sum(mExp(A, 199))
##       lam1A <- abs(e[1])
##       d <- abs(lam1A - LD)
##       if ((n - mlam1A) > 0) {
##           lam2A <- abs(e[(1 + mlam1A)])
##           rho <- lam1A/abs(lam2A)
##           R <- abs(e[n]) - abs(e[n - 1])/(abs(e[n - 1]) - abs(e[1]))
##       }
##       else {
##           lam2A <- NA
##           rho <- NA
##           R <- NA
##       }
##       sp1 <- as.vector(scc(A)$sp)
##       no.scc <- sp1[1]
##       no.scc.big <- sp1[2]
##       pscc <- sp1[3]
##       sp <- cbind(n, L, C, LD, ppr, lam1A, mlam1A, rho, R, d, no.scc,
##           no.scc.big, pscc)
##       return(sp)
##   }
##   <bytecode: 0x7fc34fa0dd50>
##   <environment: namespace:enaR>
##    --- function search by body ---
##   Function structure.statistics in namespace enaR has this body.
##    ----------- END OF FAILURE REPORT --------------
##   Error in if (class(A) != "matrix") { : the condition has length > 1
##   Calls: enaAll -> enaStructure -> structure.statistics
##   Execution halted
##
## > checking for future file timestamps ... NOTE
##   unable to verify current time
##
## 1 error x | 3 warnings x | 1 note x
```

Monitoring

See foghorn package

Good Practices

```r
goodpractice::gp(quiet = TRUE)
```

```
## Preparing: covr
```

```
## Preparing: cyclocomp
```

```
##      checking for file '/private/var/folders/7x/4c5fkmrx5r54d6sgzglyffth0000gn/T/RtmpGpcEiM/remotes1
##   -  preparing 'enaR':
##      checking DESCRIPTION meta-information ...  v  checking DESCRIPTION meta-information
##      checking vignette meta-information ...  v  checking vignette meta-information
##   -  checking for LF line-endings in source and make files and shell scripts (382ms)
##   -  checking for empty or unneeded directories
##   -  looking to see if a 'data/datalist' file should be added
##   -  building 'enaR_3.0.4.tar.gz'
##
##
```

```
## Preparing: description
```

```
## Preparing: lintr
```

```
## Preparing: namespace
```

```
## Preparing: rcmdcheck
```

```
## <U+2500><U+2500> GP enaR <U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+
##
## It is good practice to
##
##   x write unit tests for all functions, and all package code in
##     general. 0% of code lines are covered by test cases.
##
##     R/EcoNetWeb.R:19:NA
##     R/EcoNetWeb.R:20:NA
##     R/EcoNetWeb.R:21:NA
##     R/EcoNetWeb.R:22:NA
##     R/EcoNetWeb.R:23:NA
##     ... and 2118 more lines
##
##   x write short and simple functions. These functions have high
##     cyclomatic complexity:cycliv (148), enaCycle (147), enaUncertainty
##     (142), enaAscendency (64).
##   x omit "Date" in DESCRIPTION. It is not required and it gets invalid
##     quite often. A build date will be added to the package when you
##     perform `R CMD build` on it.
##   x add a "BugReports" field to DESCRIPTION, and point it to a bug
##     tracker. Many online code hosting services provide bug trackers for
##     free, https://github.com, https://gitlab.com, etc.
##   x use '<-' for assignment instead of '='. '<-' is the standard, and R
##     users and developers are used it and it is easier to read your code
##     for them if you use '<-'.
##
##     R/TES.R:29:80
##     R/TES.R:42:5
##     R/TES.R:44:5
##     R/TES.R:48:5
##     R/TES.R:50:5
##     ... and 226 more lines
##
##   x avoid long code lines, it is bad for readability. Also, many people
##     prefer editor windows that are about 80 characters wide. Try make
##     your lines shorter than 80 characters
##
##     R/EcoNetWeb.R:18:1
##     R/EcoNetWeb.R:26:1
##     R/ShannonDiversity.R:38:1
##     R/TES.R:3:1
##     R/TES.R:29:1
##     ... and 354 more lines
##
##   x omit trailing semicolons from code lines. They are not needed and
##     most R coding standards forbid them
##
##     R/balance.R:37:34
##     R/balance.R:38:26
##     R/balance.R:39:14
##     R/enaMTI.R:70:20
##     R/enaUtility.R:74:19
##
##   x avoid sapply(), it is not type safe. It might return a vector, or a
##     list, depending on the input data. Consider using vapply() instead.
##
##     R/read.scor.R:51:27
##     R/read.scor.R:52:20
##     R/read.scor.R:60:29
##     R/read.scor.R:61:21
##     R/read.scor.R:72:29
##     ... and 6 more lines
##
##   x avoid 1:length(...), 1:nrow(...), 1:ncol(...), 1:NROW(...) and
##     1:NCOL(...) expressions. They are error prone and result 1:0 if the
##     expression on the right hand side is zero. Use seq_len() or
##     seq_along() instead.
##
##     R/TET.R:65:12
##     R/bal.R:41:13
##     R/bal.R:42:15
##     R/enaEnviron.R:55:16
##     R/enaEnviron.R:74:16
##     ... and 23 more lines
##
##   x not import packages as a whole, as this can cause name clashes
##     between the imported packages. Instead, import only the specific
##     functions you need.
##   x fix this R CMD check WARNING: plot: function(x, ...) plot.lindeman:
##     function(x, enatroagg, primprod, type) See section 'Generic
##     functions and methods' in the 'Writing R Extensions' manual. Found
##     the following apparent S3 methods exported but not registered:
##     plot.lindeman See section 'Registering S3 methods' in the 'Writing
##     R Extensions' manual.
##   x fix this R CMD check WARNING: Note: significantly better
##     compression could be obtained by using R CMD build --resave-data
##     old_size new_size compress bgcModels.rda 39Kb 22Kb bzip2
##     enaModels.rda 434Kb 266Kb xz troModels.rda 392Kb 242Kb xz
##   x fix this R CMD check WARNING: checking a package with encoding
##     'UTF-8' in an ASCII locale ERROR Running examples in 'enaR-Ex.R'
##     failed The error most likely occurred in: > ### Name: plot.lindeman
##     > ### Title: plot.lindeman INPUT = network object OUTPUT = plot of
##     the > ### lindeman spine > ### Aliases: plot.lindeman > > ### **
##     Examples > > > data(enaModels) > model <- enaModels[[8]] >
##     plot.lindeman(model) Error: $ operator is invalid for atomic
##     vectors Execution halted
##   x checking examples ... WARNING checking a package with encoding
##     'UTF-8' in an ASCII locale ERROR Running examples in 'enaR-Ex.R'
##     failed The error most likely occurred in: > ### Name: plot.lindeman
##     > ### Title: plot.lindeman INPUT = network object OUTPUT = plot of
##     the > ### lindeman spine > ### Aliases: plot.lindeman > > ### **
##     Examples > > > data(enaModels) > model <- enaModels[[8]] >
##     plot.lindeman(model) Error: $ operator is invalid for atomic
##     vectors Execution halted
##   x avoid 'T' and 'F', as they are just variables which are set to the
##     logicals 'TRUE' and 'FALSE' by default, but are not reserved words
##     and hence can be overwritten by the user.  Hence, one should always
##     use 'TRUE' and 'FALSE' for the logicals.
##
##     R/as.bipartite.R:NA:NA
##     R/cycliv.R:NA:NA
##     R/cycliv.R:NA:NA
##     R/cycliv.R:NA:NA
##     R/cycliv.R:NA:NA
##     ... and 50 more lines
##
## <U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+2500><U+25
```

R OpenSci Package Review Form

Package Review

Please check off boxes as applicable, and elaborate in comments below. Your review is not limited to these topics, as described in the reviewer guide

- **Briefly describe any working relationship you have (had) with the package authors.**

□ As the reviewer I confirm that there are no conflicts of interest for me to review this work (If you are unsure whether you are in conflict, please speak to your editor *before* starting your review).

Documentation The package includes all the following forms of documentation:

□ **A statement of need** clearly stating problems the software is designed to solve and its target audience in README
□ **Installation instructions:** for the development version of package and any non-standard dependencies in README
□ **Vignette(s)** demonstrating major functionality that runs successfully locally
□ **Function Documentation:** for all exported functions in R help
□ **Examples** for all exported functions in R Help that run successfully locally
□ **Community guidelines** including contribution guidelines in the README or CONTRIBUTING, and DESCRIPTION with `URL`, `BugReports` and `Maintainer` (which may be autogenerated via `[email protected]`).

For packages co-submitting to JOSS

□ The package has an **obvious research application** according to JOSS's definition

The package contains a `paper.md` matching JOSS's requirements with:

□ **A short summary** describing the high-level functionality of the software
□ **Authors:** A list of authors with their affiliations
□ **A statement of need** clearly stating problems the software is designed to solve and its target audience.
□ **References:** with DOIs for all those that have one (e.g. papers, datasets, software).

Functionality

□ **Installation:** Installation succeeds as documented.
□ **Functionality:** Any functional claims of the software been confirmed.
□ **Performance:** Any performance claims of the software been confirmed.
□ **Automated tests:** Unit tests cover essential functions of the package and a reasonable range of inputs and conditions. All tests pass on the local machine.
□ **Packaging guidelines**: The package conforms to the rOpenSci packaging guidelines

Final approval (post-review)

□ **The author has responded to my review and made changes to my satisfaction. I recommend approving this package.**

Estimated hours spent reviewing:

□ Should the author(s) deem it appropriate, I agree to be acknowledged as a package reviewer ("rev" role) in the package DESCRIPTION file.

Review Comments