

Title: R Script for LANDISII reps
Project: LANDIS-II Updates Project
Project Component:
Component Deposition:
Author: LANDIS-II Foundation
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R script for replicate
LANDISII runs
#####

The following single line of code exactly duplicates the functionality of LANDIS-II Replicator widget. It must be executed within R as a ONE-LINE INPUT (ie no breaks in the line of code). Because the code calls a Windows, console-based "FOR" loop, the user must manually set

- 1) the number of LANDIS-II replications,
- 2) the directory path to the LANDIS-II scenario files,
- 3) the directory (folder) housing the LANDIS-II scenario files,
- 4) the directory (folder) where the replications are to be outputted, and
- 5) the name of the scenario.txt file to be run

Note that the current working directory in R is irrelevant. An example is provided below referencing the five, requisite manual settings listed above.

---- EXAMPLE-----

The full line of code to be entered as ONE LINE of input in R:

```
shell(shQuote(paste("FOR /l %A IN (1,1,3) DO (cd C:\\Users\\bmarr\\Desktop\\ & robocopy AgeOnlySuccession_s1e1 LANDISII\\Run%A /e & cd C:\\Users\\bmarr\\Desktop\\LANDISII\\Run%A\\ & call landis-ii scenario_s1e1.txt)")))
```

Itemized sections of the line of code:

```
shell(shQuote(paste("FOR /l %A IN (1,1,3) DO (cd C:\\Users\\bmarr\\Desktop\\ & ....
```

1) number of reps; here 3

```
shell(shQuote(paste("FOR /l %A IN (1,1,3) DO (cd C:\\Users\\bmarr\\Desktop\\ & ....
```

2) path to the location of LANDIS-II scenario files (note use of double slashes which are required for R)

```
... DO (cd C:\\Users\\bmarr\\Desktop\\ & robocopy AgeOnlySuccession_s1e1 LANDISII\\Run%A /e & ....
```

3) name of directory housing the LANDIS-II scenario files

```
... & robocopy AgeOnlySuccession_s1e1 LANDISII\\Run%A /e & cd C:\\Users\\bmarr\\Desktop\\LANDISII\\Run%A\\ & call landis-ii scenario_s1e1.txt)")))
```

4) name of directory where the replications are to be outputted
4) note that the ampersand signals a new command and the full directory path must be specified)

```
... & robocopy AgeOnlySuccession_s1e1 LANDISII\Run%A /e & cd C:\Users\bmarr\Desktop\LANDISII\Run%A\ & call landis-ii scenario_s1e1.txt))))
```

5) standard call to run LANDIS-II

5) LANDIS-II will run 'scenario_s1e1.txt'
