README: Automated Redistricting Simulation Using Markov Chain Monte Carlo

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1 Primary Structure of Replication Archive

This archive contains replication materials for "Automated Redistricting Simulation Using Markov Chain Monte Carlo" (forthcoming, *Journal of Computational and Graphical Statistics*). There are two primary folders — `paper`, and `appendix`.

Each folder within `paper` and `appendix` contains materials to replicate a specific figure. Each folder contains a primary `R` script to replicate the results, labelled `fig[number].R` for the main paper and `fig_s[number].R` for the appendix, which corresponds with the figure number. Other folders and code files include other dependencies or materials for that particular figure.

2 OS, R, and Package Version Information

```
> sessionInfo()
R version 3.6.0 (2019-04-26)
Platform: x86_64-apple-darwin15.6.0 (64-bit)
Running under: macOS  10.15.1

Matrix products: default
BLAS:   /System/Library/Frameworks/Accelerate.framework/Versions/A/Frameworks
/vecLib.framework/Versions/A/libBLAS.dylib
LAPACK: /Library/Frameworks/R.framework/Versions/3.6/Resources/lib/libRlapack.dylib

locale:
[1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8

attached base packages:
```

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```
[1] grid      parallel  stats     graphics  grDevices utils     datasets  methods
[9] base

other attached packages:
 [1] latex2exp_0.4.0    scales_1.0.0       Cairo_1.5-10       MASS_7.3-51.4
 [5] rgdal_1.4-4        doMC_1.3.5         doParallel_1.0.14  iterators_1.0.10
 [9] foreach_1.4.4      spdep_1.1-2        sf_0.7-4           spData_0.3.0
[13] gridExtra_2.3      RColorBrewer_1.1-2 ggthemes_4.2.0     Rcpp_1.0.1
[17] forcats_0.4.0      stringr_1.4.0      dplyr_0.8.1        purrr_0.3.2
[21] readr_1.3.1        tidyr_0.8.3        tibble_2.1.3       ggplot2_3.1.1
[25] tidyverse_1.2.1    coda_0.19-2        maptools_0.9-5     sp_1.3-1
[29] geiger_2.0.6.2     ape_5.3            igraph_1.2.4.1     redist_1.3-3

loaded via a namespace (and not attached):
 [1] httr_1.4.0         jsonlite_1.6       splines_3.6.0      modelr_0.1.4
 [5] gtools_3.8.1       assertthat_0.2.1   expm_0.999-4       cellranger_1.1.0
 [9] LearnBayes_2.15.1  pillar_1.4.1       backports_1.1.4    lattice_0.20-38
[13] glue_1.3.1         digest_0.6.19      rvest_0.3.4        colorspace_1.4-1
[17] Matrix_1.2-17      plyr_1.8.4         pkgconfig_2.0.2    broom_0.5.2
[21] haven_2.1.0        gmodels_2.18.1     mvtnorm_1.0-11     gdata_2.18.0
[25] generics_0.0.2     withr_2.1.2        lazyeval_0.2.2     cli_1.1.0
[29] magrittr_1.5       crayon_1.3.4       readxl_1.3.1       deldir_0.1-16
[33] nlme_3.1-139       xml2_1.2.0         foreign_0.8-71     class_7.3-15
[37] tools_3.6.0        hms_0.4.2          munsell_0.5.0      compiler_3.6.0
[41] e1071_1.7-2        rlang_0.3.4        classInt_0.3-3     units_0.6-3
[45] rstudioapi_0.10    subplex_1.5-4      boot_1.3-22        gtable_0.3.0
[49] codetools_0.2-16   deSolve_1.27       DBI_1.0.0          R6_2.4.0
[53] lubridate_1.7.4    KernSmooth_2.23-15 stringi_1.4.3      tidyselect_0.2.5
```