This folder cotains codes and data for reproducing "Distributional Tests for Regression Discontinuity: Theory and Empirical Examples" by Shu Shen and Xiaohan Zhang.

All tables and graphs of the paper were produced in R. The R codes call for the use of bandwidth selection functions, provided as companions to Calonico, Cattaneo, and Titiunik (2014). Besides R codes, the ado file "DRD.ado" can be used to carry out the proposed distributional RD tests in Stata. Demonstration is given for the first application.

To replicate the simulation results, please use the codes in the folder "simulations". The simulation results will be saved to the subfolder "mktable". Then you can use "simu_mktable.R" to reproduce the tables in the simulation section.

To replicate the first application, please run "main_romanian.R". The dataset "romanian_2sch.dta" is the two-school town subsample of Pop-Eleches and Urquiola (2013). The folder also contains the do file "main_romanian.do" that produces results that match Table 1. There is a very small difference between the results produced by R and Stata due to the rounding errors.

To replicate the third application, please run "main_ab.R". The dataset "app3.dta" is from Oreopoulos (2006).

To obtain the confidential dataset used for the second application, please contact NYC Department of Education at http://schools.nyc.gov/Accountability/data/DataRequests.htm.

Please email shushen@ucdavis.edu if you have any question regarding the codes.

References

Calonico, S., M. D. Cattaneo, and R. Titiunik (2014): "Robust Nonparametric Confidence Intervals for Regression? Discontinuity Designs," *Econometrica*, 82(6), 2295–2326.

Oreopoulos, P. (2006): "Estimating Average and Local Average Treatment Effects of Education when Compulsory Schooling Laws Really Matter," *American Economic Review*, 96(1), 152–175.

Pop-Eleches, C., and M. Urquiola (2013): "Going to a Better School: Effects and Behavioral Responses," *American Economic Review*, 103(4), 1289–1324.