Supplement: Wavelet estimation of the dimensionality of curve time series

Rodney V. Fonseca · Aluísio Pinheiro

1 Supplementary Figures for simulation study in Section 6

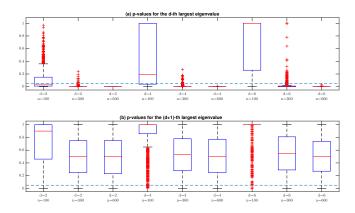


Fig. 1 Boxplots of the p-values of the tests for the d-th and (d+1)-th largest eigenvalues, for each sample size and true value of d in the case where a thresholding is applied before performing the bootstrap. The segmented line represents the significance level used (5%).

We thank the Associate Editor and two anonymous referees for their insightful comments and suggestions, which significantly improved the manuscript. The first author acknowledges FAPESP Grant 2016/24469-6. The second author acknowledges FAPESP Grants 2013/00506-1 and 2018/04654-9 and CNPq Grant 309230/2017-9.

Rodney V. Fonseca (Corresponding author)

Department of Statistics, University of Campinas, Campinas, SP, 13083-970, Brazil E-mail: ra192588@ime.unicamp.br

Aluísio Pinheiro

Department of Statistics, University of Campinas, Campinas, SP, 13083-970, Brazil

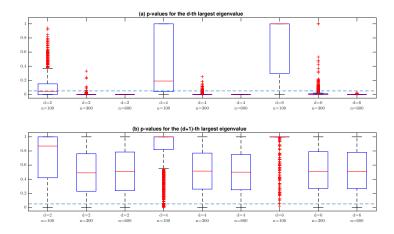


Fig. 2 Boxplots of the p-values of the tests for the d-th and (d+1)-th largest eigenvalues, for each sample size and true value of d using the bootstrap with the residual ε_t^{thr} , obtained from applying thresholding to the wavelet coefficients of the estimated mean and eigenfunctions. The segmented line represents the significance level used (5%).

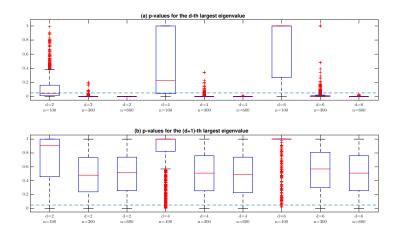


Fig. 3 Boxplots of the p-values of the tests for the d-th and (d+1)-th largest eigenvalues, for each sample size and true value of d when the wavestrapping method of Percival et al. (2000) is applied. The segmented line represents the significance level used (5%).