Erratum: Influence of the event magnitude on the predictability of an extreme event [Phys. Rev. E 77, 011108 (2008)]

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DOI: 10.1103/PhysRevE.78.029902

PACS number(s): 02.50.-r, 05.45.Tp, 99.10.Cd

The receiver operator characteristic curves (ROC curves) in Fig. 5 are not correctly labeled. The investigated values of η are $\eta=0$, $\eta=0.5$, $\eta=1$, $\eta=1.5$, and $\eta=2$ and thus smaller than the previously presented values. To clarify this issue we present Fig. 5 again here, with the correct labeling.

Furthermore, we compute also ROC curves for larger values of η and we find a qualitatively different behavior in the resulting ROC curves presented in Fig. 5a.

The ROC curves for larger values of η show that in symmetrized exponentially distributed random numbers, larger increments are also better predictable, although the effect is less strong than in the case of Gaussian random numbers. Additionally Fig. 5a emphasizes that our test condition characterizes correctly the behavior in the vicinity of the origin, but does not provide us with information about the magnitude dependence in other regimes of the ROC.

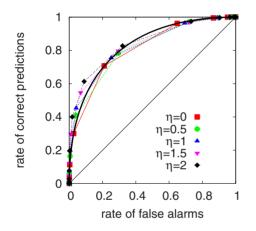


FIG. 5. (Color online) The ROC curves for the prediction of increments in symmetrized exponentially distributed i. i. d. random numbers with the correct labeling. The black line indicates the analytically evaluated ROC curve for η =0.

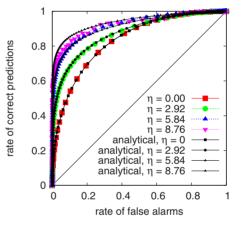


FIG. 5a. (Color online) The ROC curves for the prediction of increments in symmetrized exponentially distributed i. i. d. random numbers, here for larger values of η . The black lines with smaller symbols are the result of the analytical evaluation according to Eqs. (6) and (7), the colored curves with larger symbols represent the numerical results.