

Figure S5: Women 100 meters. We included in the analysis the results of gold, silver and bronze medalists. In this case, we could not provide an estimation of the statistical significance due to the intrinsic correlations among variables (the improvement in year $y$ of gold medalists is positively correlated with those of the same year obtained by silver and gold medalists). The best estimate of $p_{\infty}$ is instead identified as the value for which the Anderson-Darling distance is minimal. We find: $\hat{p}_{\infty}=9.64, \hat{\mu}=0.05, \hat{\sigma}=0.14$ and $A^{* 2}=0.22$.

