Erratum: Tropical approximation to finish time of activity networks [Phys. Rev. E 106, L012301 (2022)]

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The figures for simulated projects have an error in the original paper. The code to calculate the free floats was using $w_{ij} = y_j - x_i$ instead of the correct expression $w_{ij} = x_j - x_i$ [see Eq. (3)]. This error is the actual cause of the anomalies observed in the small σ region in Figs. 2 and 3. After correcting this coding error, the new Figs. 1 and 3 are shown here. The data for real project networks (Figs. 4 and 5) is not affected by this Erratum. Based on this evidence, I conclude that the tropical approximation is valid for $\sigma \gg 1$, where σ is the variance of the logarithm of exogenous delays.

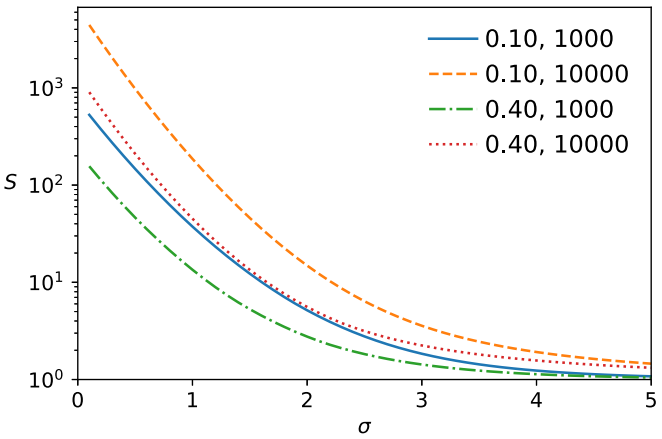

FIG. 1. Slope between the calculated $p80$s using $f = \text{sum}$ vs using $f = \max$ for $\vec{d} = \vec{0}$ and the (q, n) indicated in the legend.

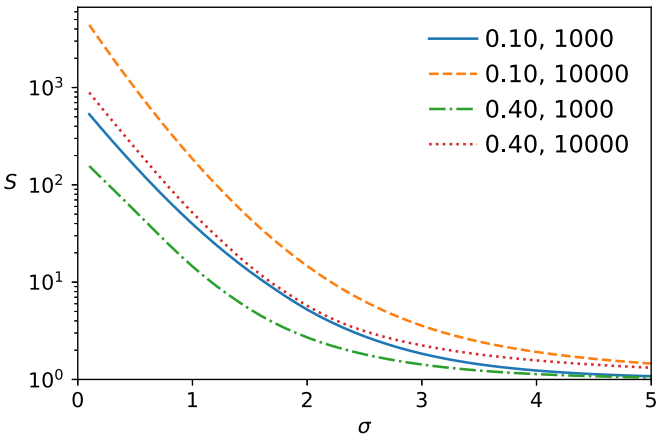

FIG. 2. Slope between the calculated $p80$s using $f = \text{sum}$ vs using $f = \max$ for $\sigma_1 = 1$ and the (q, n) indicated in the legend.

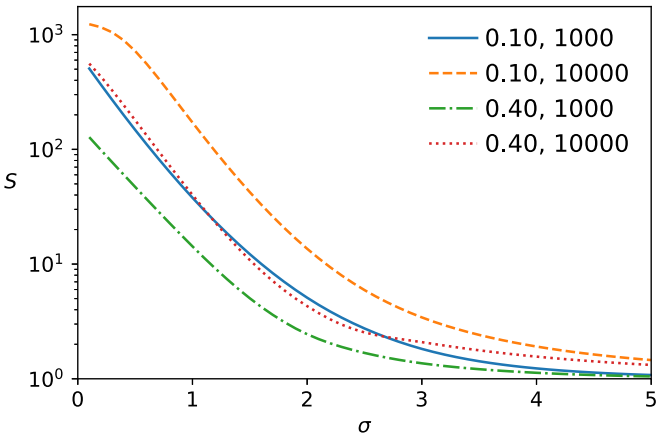

FIG. 3. Slope between the calculated $p80$s using $f = \text{sum}$ vs using $f = \max$ for $\sigma_1 = 3$ and the (q, n) indicated in the legend.