No correlation discerned between the periods of rise and dominance of simulated species in a model of biological evolution

ALAN KUHNLE, Florida State University — In [1], Liow et al. discern a general feature of the occurrence trajectories of biological species: the periods of rise and fall of a typical species are about as long as the period of dominance. In this work, an individual-based model of biological evolution that was developed by Rikvold and Zia in [2] is investigated, but no analogous feature is observed in the simulated species populations. Instead, the periods of rise and fall of a simulated species cannot always be sensibly defined; when it does make sense to define these quantities, they are quite short and independent of the period of dominance.