

**Sanderson, Warren C.**

**Predictability, complexity, and catastrophe in a collapsible of population, development, and environmental interactions.** (English) [Zbl 0873.92035](#)

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Summary: More and more population forecasts are being produced with associated 95 percent confidence intervals. How confident are we of those confidence intervals? We produce a simulated dataset in which we know both past and future population sizes, and the true 95 percent confidence intervals at various future dates. We use the past data to produce population forecasts and estimated 95 percent confidence intervals using various functional forms. We then compare the true 95 percent confidence intervals with the estimated ones. This comparison shows that we are not at all confident of the estimated 95 percent confidence intervals.

**MSC:**

[91D20](#) Mathematical geography and demography

[62P99](#) Applications of statistics

**Keywords:**

population prediction intervals; model complexity; demographic economic and environmental interactions; demography; population forecasts; simulated dataset; 95 percent confidence intervals

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