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Exponential growth model: from horizontal to linear asymptote. (English) Zbl 1296.62140
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Summary: We present a smooth function that can be used as regression curve for modeling growth phenomena requiring an increasing curvilinear concave asymptote. This model is obtained as the product of a concave asymptotic curve and the exponential model. In addition to its increasing character with a curvilinear asymptote, including horizontal or linear increasing asymptote, the resulting model provides curves with a single inflection point. Numerical examples are presented.

MSC:

62J02 General nonlinear regression

65D10 Numerical smoothing, curve fitting

Keywords:

concave curvilinear asymptote; exponential model; growth model; single inflection point

Full Text: [DOI](#)

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