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MULTIPHASIC SDE MODEL: AN APPLICATION TO CATTLE GROWTH

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The evolution of an individual size in a random environment can be adequately described through stochastic differential equations models. We have developed this type of models, studying estimation, prediction and optimization issues and applied it to bovine growth data [1, 2, 3]

We have considered a monophasic model, in which there is only one functional form describing the average dynamics of the complete growth curve. Here we present the generalization to the multiphasic case, in which we consider that the growth coefficient assumes different values for different phases of the animal's life.

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