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We first develop three nonlinear stochastic models with time varying coefficients. Then, we derive the option pricing formula in the context of the proposed three nonlinear stochastic models. The option pricing formula in the framework of hybrid systems, namely, Hybrid GBM (HGBM) and hybrid nonlinear stochastic models are also presented. The simulation results are given at the end of this presentation. (Received September 17, 2010)