# I-Binomal process and Applications

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In this paper we consider the I-Binomial process. We define the process as a compound Binomial with geometric compounding distribution, and as a discrete time birth process. We show that the definitions are equivalent. Then, using the definitions, we give three characterizations of the process. Some properties are given. As application we consider a discrete time risk model with I-Binomial counting process. The estimation of the ruin probability is analyzed.