

The purpose of this thesis is to compare the classic autoregressive model of order 1 to integer autoregressive model of order 1. Considering the popularity of AR(1) model, only the basics are covered within this thesis. The main focus is on the INAR(1) model. Operator \circ necessary for INAR(1) definition is introduced alongside with its properties with proof. All of the non-trivial properties of INAR(1) are followed by detailed proof, stationarity condition is also derived. Common estimation techniques are described for poisson INAR(1) model. This thesis also contains simulation study, which focuses on the rate of convergence of estimates of parameters.