

Ruin related quantities in a risk model based on time series for count data

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We consider various specifications of the general discrete time risk model in which a serial dependence structure is introduced between the claims for each period. We consider risk models based on compound distributions assuming a Poisson INAR(1) process as specific dependence structure. Within this model, we investigate the expected aggregate claim amount and we derive expressions for a function that allows us to find the Lundberg coefficient. We also discuss the expected discounted Gerber-Shiu penalty function in finite and infinite time.