

Existence of unique positive solution

In order for the model to make sense , 有

3.1

For any given initial value $I(0) = I_0 \in (0, N)$, the SDE (??) has a unique global positive solution $I(t) \in (0, N)$ for all $t \geq 0$ with probability one, namely, 有

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Theorem (3.1)

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