

Re: Poisson question

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- *From:* israel@xxxxxxxxxxx (Robert Israel)
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In article <1139819280.946242.181400@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>, C6L1V@xxxxxxx <C6L1V@xxxxxxx> wrote:

For the exact Poisson distribution, the variance equals the mean, but for a finite `_sample_` from the Poisson distribution, there is no reason why this should be true. However, your question **does** raise an interesting point: for a Poisson distribution, we seem to have two different unbiased estimators of variance. The first is just the mean itself, which is unbiased as a measure of the mean and hence also of the variance. The second one is the usual sample variance, which is known to be unbiased for any distribution. Hmmm.....seems worth thinking about some more.

Since sample mean is a sufficient statistic, it is the minimal variance unbiased estimator for the parameter λ .

Robert Israel israel@xxxxxxxxxxx
Department of Mathematics <http://www.math.ubc.ca/~israel>
University of British Columbia Vancouver, BC, Canada