Subject: sample mean and parametric mean?
Posted by hkc on Fri, 17 May 2002 18:58:09 GMT
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i tried to find the mean of the rain rate.
because the rainfall data are not continuous,
i tried to fit data with the gamma distribution using mininum
chi-squared method
and calculated the mean using the parameters of gamma function.

the shape of the histogram of rain rates is highly skewed to the right
and shape parameter is less than 0.5.
the results show that in the most cases, the parametric mean
underestimates sample mean.
why are the sample mean and parametric mean (calculated by the scale
and shape parameters)
different?
and at this situation, what is good mean for rain rates?

i tried to do same method with random numbers generated by gamma
functions.
the result is same,
namely if shape parameter(alpha) is less 0.5, the parametric mean
underestimates sample mean,
if not, the sample mean and parametric are same...

please, let me know if you have any ideas..

thanks