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Subject: Re: gamma random numbers ?

Posted by [Craig Markwardt](#) on Wed, 15 May 2002 22:43:57 GMT

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hkc@ariel.met.tamu.edu (hkc) writes:

- > i tried to make a gamma random numbers generator with two variables,
- > shape and scale parameters.
- > my simple idea is to use a uniformly distributed random number
- > generators in IDL.
- > then the probability of each bins is set to be distributed by gamma
- > functions.
- > it means that inside of each bins, data are distributed uniformly,
- > but overall probability is distributed by gamma.
- > do you think it is O.K.?
- > please let me know if you have any ideas for this.
- > thanks

This is the second time you have asked the same question, but I made a response the first time. I'll assume you missed it. Or, did this response not help?

Craig Markwardt writes:

- >
- > I think you just multiply the deviate by the scale parameter, right?
- >
- > See beautiful on-line book here:
- > [http://www.itl.nist.gov/div898/handbook/eda/section3/eda366b .htm](http://www.itl.nist.gov/div898/handbook/eda/section3/eda366b.htm)

I.e.,

`r = randomu(seed, gamma=SHAPE)*SCALE`

Craig

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Craig B. Markwardt, Ph.D.      EMAIL: [craigmnet@cow.physics.wisc.edu](mailto:craigmnet@cow.physics.wisc.edu)  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: gamma random numbers ?

Posted by [Andrew Lough](#) on Thu, 16 May 2002 15:30:22 GMT

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I would add to Craig's response an assignment to "seed"

that looks something like this:

```
seed = long((systime(1) - long(systime(1))) * 1.e6)
```

```
> r = randomu(seed, gamma=SHAPE)*SCALE
```

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Andrew Loughe =====  
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