Subject: Re: A question about Gaussian distributions in IDL
Posted by Kenneth P. Bowman on Thu, 30 Jun 2005 02:14:46 GMT
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In article <1120080420.668477.173460@z14g2000cwz.googlegroups.com>,
"ntigris@gmail.com" <ntigris@gmail.com> wrote:

> Hello,
>
> IDL's RANDOMN function creates a normal distribution with a mean of 0
> and a variance of 1. I need a variance other than one. Is there a
> simple way to obtain such a distribution in IDL?
>
> Thanks a lot!

Multiply the result of RANDOMN by the desired standard deviation.

Cheers, Ken Bowman

```
IDL> n   = 100000
IDL> x   = RANDOMN(seed, n)
IDL> print, stdev(x)
     1.00107
IDL> var = 9.0
IDL> std = sqrt(var)
IDL> print, stdev(std*x)
     3.00322
IDL> print, variance(std*x)
% Compiled module: VARIANCE.
% Compiled module: MOMENT.
     9.01934
```