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Subject: Re: Regression fit and random noise  
Posted by [Phillip Bitzer](#) on Thu, 28 Mar 2013 23:40:49 GMT  
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This is actually a good point, and likely explains your asymptotic value of the coefficient. Check out the sample code I posted to see an example of how to add uniform noise distributed about 0

```
----> noiseFactor*(RANDOMU(seed, npts)-0.5)
```

Depending on the data, and what you're trying to do, you could instead add Gaussian-distributed noise as mentioned. You'll probably want to modify the width of the Gaussian noise to *really* test the model as well.

See the help for more:

<http://www.exelisvis.com/docs/RANDOMU.html>

<http://www.exelisvis.com/docs/RANDOMN.html>

On Thursday, March 28, 2013 6:26:30 PM UTC-5, Mats Löfdahl wrote:

>

>

> Maybe I misunderstand what you are trying to do but... Are you aware that randomu has a uniform distribution between 0 and 1? So you are adding on the average something like  $0.5 * \text{noise\_ratio}$  to your original signal. So maybe you want to add  $\text{noise\_ratio} * (\text{randomu}(...) - 0.5)$  instead. Or, since randomn is normal distributed with zero mean, simply  $\text{noise\_ratio} * \text{randomn}(...)$ .

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