Subject: Re: Plot difference
Posted by Kenneth P. Bowman on Fri, 01 May 2009 01:56:50 GMT
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In article
<14231450-66e4-4a9b-837f-b3335d8be661@y33g2000prg.googlegroups.com>,
 Jeremy Bailin <astroconst@gmail.com> wrote:

>>
>>
>>
>>> Hi,

>>> points I calculate the mean and the standard deviation. I get
>>> different plots if I plot just the 2D data or if I rebin to make a 1D
>>> vector.
>>> Let's say that my 2D arrays for the mean is called average and the
>>> standard deviation is standard. Then the results are different if I
>>> do:
>>
>>> plot, average, standard, psym = 4
>>
>>> and
>>
>>> plot, rebin(average, N_Elements(average)), rebin(standard, n_elements
>>> (standard)), psym = 4
>>
>>> Any hint why is that?
>>
>> I don't understand what the problem is.
>>
>> a=randomn(seed,100000L) & print,total(abs(a-rebin(a,n_elements(a))))
>> shows that a and rebin(a,n_elements(a)) are identical (as they should
>> be).
>>
>> Ciao,
>> Paolo
>>
>>
>>
>>> Thanks,
>>
>>> Giorgio
>>
>>
>

> OP said it's a 2D array...
>
> IDL> seed=43l
> IDL> a = randomn(seed,100l,100l)
> IDL> b = rebin(a,n_elements(a))
> IDL> print, a[0:5]
> -0.908351 -0.440050 -0.200080 -0.260391 0.113894
> -0.456169
> IDL> print, b[0:5]
> -0.204416 -0.201433 -0.198449 -0.195465 -0.192481
> -0.189497
>
> -Jeremy.

It doesn't matter whether the arrays are 2-D or 1-D as far
as PLOT is concerned.

If you really need to make the array 1-D, use REFORM, not REBIN.
(REBIN will work if you set the /SAMPLE keyword, but that really
isn't the right tool for the job.)

Ken Bowman
