Subject: Re: How to increase the speed
Posted by Moritz Fischer on Mon, 09 Sep 2013 10:44:59 GMT
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Hi!

Try the '#' operator (and some algebra to remove the multiplication):

result = exp(a#replicate(1d,2e5) - replicate(1d,250)#(b-c))

You could use reform/rebin with the SAMPLE keyword to do somthing similar.

Am 09.09.2013 12:11, schrieb sivan:
> Hello everyone,
>
> I'll directly tell you the problem. I have three arrays, one of them
> contains hundreds of elements, the others have the same number of
> elements and contain much more.
>
> Let say (a is the first, b is the 2nd, and c is the 3rd array)
> a=findgen(250)+1 b=randomn(seed, 2e5) c=randomn(seed, 2e5)
>
> What I want to do is to calculate the following equation for each
> element of a and every element of b and c without using the for
> loop.
>
> exp(a(i) - b)*exp(c)
>
> The result should be a two dimensional array (array[250, 2e5]).
>
> Problem is also shown via this picture
> (http://oi42.tinypic.com/10zcx7p.jpg).
>
> I use the following code but it is very slow.
>
> result=dblarr(250, 2e5) for i=0, 249 do result(i,*)=exp(a(i) -
> b)*exp(c)
>
> Thanks in advice, Sivan.
>