Subject: Re: locate particles on a grid
Posted by Craig Markwardt on Mon, 14 May 2012 23:30:30 GMT
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On Monday, May 14, 2012 4:35:29 PM UTC-4, aman wrote:
> I wrote a code in IDL to locate 10,000 particles over a grid of
> size : 512 x 512 using Kernel statistics, in particular Gaussian. This
> program has 3 FOR loops with an exponential calculation. It is really
> taking a long time to get me an output. Two days have already been
> over and this code is still running. I am not sure if IDL is good for
> this array size and 512x512 iterations.
>
> My question is whether it is IDL problem or my code problem. I
> discussed it with other students and they suggested me to do this work
> in FORTRAN. But I am still not very sure about this, as many
> astronomers use IDL for their research.

Next time, put some PRINT statements so that you have some progress information.

I imagine you are looping over X and Y. Don't do that. Precompute X and Y as 2D arrays, and only loop over the 10000 count. IDL just as happily evaluates EXP(-X^2-Y^2) where X and Y are 2D arrays as when X and Y are scalars.

This goes with the philosophy of doing a lot of operations per FOR loop iteration.

Craig