Subject: Re: Help with getting rid of a FOR loop
Posted by nathan12343 on Tue, 20 May 2008 23:48:25 GMT
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On May 20, 5:33 pm, pgri...@gmail.com wrote:
> Jean H wrote:
>>> dist=sqrt((xx-xcenter)^2+(yy-ycenter)^2) ;array of radii
>
>>> mask=fltarr(imsize,imsize)-1
>
>>> FOR i=0,num-1 DO BEGIN
>>> wh=where(dist GE r[i] and dist LE r[i+1])
>>> mask[wh]=i
>>> ENDFOR
>
>>> END
>
>>> I would like to find some way to get rid of the FOR loop at the end.
>>> All I'm doing in that loop is going through the annuli one by one,
>>> finding the pixels in that annuli, and setting the corresponding
>>> pixels in mask to the correct mask value.
>
>>> Thanks for any help anyone can provide!
>
>>> Nathan Goldbaum
>
>> Hi Nathan,
>
>> if your computer memory permits it, you can
>> 1) reform your dist array so it is now a n_elements(dist) *
>> n_elements(r) array. basically, you will copy the distances
>> n_elements(r) times.
>> 2) reform your r array so it is now a n_elements(dist) * n_elements(r)
>> array.
>> 3) shift the array from (2) by 1
>> 4) do where(new_dist GT new_r and new_dist LT new_r_plus_1)
>> 5) divide the returned index by n_elements(r). You will know, for each
>> r, which elements satisfies your condition!
>
> I guess that the original problem is not so much that for loops are
> slow,
> but that "where" is slow. So I fear that the above strategy won't gain
> much speed, as now where must work on a much larger array...
>
> Ciao,
> Paolo
>
>

>
>> Sorry if it is not too clear... that's a "quick answer before to leave"...
>> Jean
>
>

Will histogram work with unevenly spaced bins?
