Subject: Re: Help with getting rid of a FOR loop
Posted by Jean H. on Tue, 20 May 2008 22:55:46 GMT
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> 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!

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