Subject: Re: Help requested in eradicating FOR loops
Posted by dplatten on Tue, 18 Dec 2007 11:00:45 GMT
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> Off the top of my head:
> 1-reform the points to match the size of the image: x1 =
> reform(x1,image_height,image_width)
> 2-make in "index" array: idx = findgen(image_height,image_width)
> 3-make x-index and y-index arrays: x = idx mod image_height & y = idx/
> image_height (or maybe those should be image_width?)
> 4-do the calculation: distance = ((y1-y2)*x + (x2-x1)*y + (x1*y2-
> x2*y1)) / SQRT((x2-x1)^2 + (y2-y1)^2)
> 5-put together the results matrix: results =
> [[reform(image,image_height*image_width)],[distance]] (I'd have to
> check the brackets, I always do)

Thanks for the reply - as I understand it I need to make an array to hold x pixel positions and one to hold y pixel positions. For a 4 x 6 array they would look like this:

x locations: [0,1,2,3, 0,1,2,3, 0,1,2,3, 0,1,2,3, 0,1,2,3, 0,1,2,3]
y locations: [0,0,0,0, 1,1,1,1, 2,2,2,2, 3,3,3,3, 4,4,4,4, 5,5,5,5]

I can make the x array by doing this:

```
test_image = findgen(4, 6) ; a dummy test "image"
temp = findgen(4 * 6)
x_locations = temp mod 4
```

but I am having problems creating the y locations array. Some help would be appreciated.

Thanks, David