
Subject: Help requested in eradicating FOR loops
Posted by [dplatten](#) on Fri, 14 Dec 2007 16:06:26 GMT
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Dear IDL users,

I would really appreciate some help in removing a nested FOR loop.

```
FOR x=0, image_width-1 DO BEGIN
  FOR y=0, image_height-1 DO BEGIN
    ; Write the current pixel value
    results[(x*mtf_region_height)+y, 1] = image[x,y]
    ; Calculate the distance of the current pixel from the
line defined
by the
    ; two points (x1, y1) and (x2, y2).
    results[(x*image_height)+y, 0] = ( (y1-y2)*x + (x2-
x1)*y + (x1*y2 -
x2*y1) ) / SQRT( (x2-x1)^2 + (y2-y1)^2 )
  ENDFOR
ENDFOR
```

'image' is a 2d image array

I want to work out the distance of each pixel from a line that is defined by the two points (x1, y1), (x2, y2) and store this distance, together with the pixel value in a 'results' array. The 'results' array has the dimensions [(image_height*image_width), 2].

The above bit of code works but is a bit slow.

Any advice would be much appreciated.

Thanks,

David
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