Subject: Re: 3-dimensional integration? [IDL 5.4]
Posted by Timm Weitkamp on Mon, 23 Jun 2003 14:04:30 GMT
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Oops! When I just wrote,

> Circular regions take more than one line, but are easily doable too.
> Assume that r is the radius of the circle over which you want to
> integrate (in pixels). Then you should do something like this:
>
> dim = SIZE(data, /DIMENSIONS)
> xarr = findgen(dim[0]) # (1+fltarr(dim[1]))
> yarr = findgen(dim[1]) ## (1+fltarr(dim[0]))
> rarr = SQRT((xarr-x)^2 + (yarr-y)^2)
> idxList = WHERE(rarr LE r, npix)
> IF npix NE 0 THEN tot = TOTAL(data[idxList])

... I hit the "send" key too early. The code above works, but its last two lines can (and should) be merged into the more elegant

```
tot = TOTAL( (rarr LE r) * data )
```

I think this way of directly using a logical expression for indexing, which in many cases I find very handy, is sometimes ignored by the worshipers of WHERE.

Timm

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Timm Weitkamp <http://people.web.psi.ch/weitkamp>