
Subject: Re: finding the center of gravity of an irregularly shaped roi within a 2d array

Posted by [David Fanning](#) on Mon, 03 Sep 2012 16:24:43 GMT

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ian.j.ashpole@googlemail.com writes:

> If i can ask, as i am unable to find this in the code as a relative novice, how does your program actually calculate the centroid coordinates?

Each pixel in the ROI is assigned a "weight" of 1, then a simple center-of-mass calculation is done:

```
totalMass = Total(array)
xcm = Total( Total(array, 2) * Indgen(arrayXSize) * scale[0] ) $
      / totalMass
ycm = Total( Total(array, 1) * Indgen(arrayYSize) * scale[1] ) $
      / totalMass
center = [xcm, ycm]
```

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
