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 16:26:40 GMT
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David Fanning writes:

>
> 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]

Sorry, I meant to include a link to additional information about center-of-mass calculations:

  http://www.idlcoyote.com/tips/centroid.html

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.")