
Subject: Re: about label regions
Posted by [Ted Cary](#) on Mon, 06 May 2002 21:13:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

Xiaoying Jin wrote:

> I know there is a function 'label_region' built in IDL. But that is for the
> case a lot of disconnected regions separated by background. However, In my
> case, there is no background, all the regions connect with some other
> regions.
>>
>> I have an graylevel image that having a lot of touching regions. The
>> pixels in the same region have the same gray level and they connect
>> with each other. How can I give each of these regions a unique label?
>>

> But the regions maybe have the same gray level if they do not connect
> with each other. So if I use WHERE or HISTOGRAM, it will not discriminate
> those regions with the same gray level. But I want label each of them a
> unique label.
> Any suggestion?

Xiaoying Jin,

My suggestion is to provide a link to your image. I think I understand what you're talking about now: something like a grayscale photograph of a jar of marbles? All the marbles are touching touching each other, so there is no background. Two marbles of the same color may not belong to the same region. You want to give a unique label to each marble/region.

If the regions to label are each in a different grayscale range or--even better--if each region is uniformly gray, then this problem is not difficult. You can use WHERE or HISTOGRAM like David suggested to get a mask of regions at each gray level, and then use LABEL_REGION on each mask. If there are contiguous regions of exactly the same gray level that must be identified, things are more complicated--you'd have to differentiate based on shape or maybe use some of the morphology functions.

Before I tell you how to continue, is this the type of problem you are talking about? Remember, a link to a picture would help a lot.

Good luck,

TC
