Subject: Image segmentation programs in IDL?
Posted by Tim[3] on Wed, 13 Dec 2006 14:39:09 GMT
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I am looking for image segmentation routines that are available in or written in IDL. I think my images are not very challenging. They have been thresholded, so that the regions I want to segment all have values of -1, and the background is +1. The boundaries are smooth. Examples of the images can be found about a third of the way down the page at http://physics.kenyon.edu/people/sullivan/Research/CahnHilli ard/ .

I am aware of the particle tracking algoriths of Crocker, Weeks, and Spalding, et al., but their problem is identifying same size circular images and my objects vary in widely size and shape.

There is one complication that I can live without at first, but would eventually need to rectify. My fields are have periodic boundary conditions, so eventually I would like an algorithm that identified as one object, an object that wraps around the top and bottom and left and right sides of the image.

If I knew anything about image segmentation, I suspect this would be easy. But I don't. Any help would be appreciated.

Tim Sullivan
sullivan@kenyon.edu

Subject: Re: Image segmentation programs in IDL?
Posted by Anne[1] on Thu, 21 Dec 2006 13:45:49 GMT
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Hi Tim,
I agree that label regions is probably going to work. The boundary conditions should be fairly easy to cope with. On first look I would just create 2 extra copies of the image using the shift command (x and y direction) and repeat the label regions command. Objects that have wrapped around will be recombined in the shifted image and it should be straight forward to identify these.

Anne Martel
Imaging Research
Medical Biophysics
University of Toronto

Subject: Re: Image segmentation programs in IDL?

Posted by Tim[2] on Thu, 21 Dec 2006 20:08:37 GMT
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Thanks!

Label_regions did do the trick. I've been distracted lately, but hope
to post my resultant code soon.

Tim

On Dec 21, 8:45 am, "Anne" <anne.mar...@swri.ca> wrote:
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> Anne Martel
> Imaging Research
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