
Subject: Re: is there a 3D equivalent of CONTOUR?
Posted by [David Fanning](#) on Wed, 07 Oct 2009 16:05:08 GMT
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Dorthe Wildenschild writes:

> I'm trying to use the ComputeGeometry function in 3 dimensions, but to
> define my ROI, I need to outline (contour, or at least that's how I do
> it 2D) my objects - and they're 3D. Any suggestions out there?

ISOSURFACE?

Cheers,

David

--
David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: is there a 3D equivalent of CONTOUR?
Posted by [dorth](#)e on Thu, 08 Oct 2009 09:11:11 GMT
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On Oct 7, 9:05 am, David Fanning <n...@dfanning.com> wrote:

> Dorthe Wildenschild writes:
>> I'm trying to use the ComputeGeometry function in 3 dimensions, but to
>> define my ROI, I need to outline (contour, or at least that's how I do
>> it 2D) my objects - and they're 3D. Any suggestions out there?
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> ISOSURFACE?
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> Cheers,
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> David
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> --
> David Fanning, Ph.D.
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excellent, - but I can't get it to work.. not very good at working
with objects I'm afraid - I do it once every 3 years or so :-)

Here's what I do:

I use LABEL_REGION to separate all the objects in my image and then I pick one in a loop structure, representing "t" below

```
                                ISOSURFACE, label_image,
t, Outverts, Outconn
; print, outverts
  Roi=Obj_New('IDLanROI', Outverts, type=2)

  Status = Roi-> ComputeGeometry(Area=area,Perimeter=perimeter,
Centroid=centroid)

  t_perimeter(r)=perimeter
  t_area(r-1)=area
  t_x_center(r)=centroid[0]
  t_y_center(r)=centroid[1]
  blob_siz(r)=blob_size[1]
```

I get lots of values in Outverts, but area, perimeter etc. are all zero?

Any ideas for the slightly incompetent...?

BTW, nice to see you're still very active on this site.
Dorthe

Subject: Re: is there a 3D equivalent of CONTOUR?
Posted by [David Fanning](#) on Thu, 08 Oct 2009 13:50:16 GMT
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Dorthe Wildenschild writes:

```
> excellent, - but I can't get it to work.. not very good at working
> with objects I'm afraid - I do it once every 3 years or so :-)
>
> Here's what I do:
>
> I use LABEL_REGION to separate all the objects in my image and then I
> pick one in a loop structure, representing "t" below
>
>                                ISOSURFACE, label_image,
> t, Outverts, Outconn
> ; print, outverts
>   Roi=Obj_New('IDLanROI', Outverts, type=2)
>
>   Status = Roi-> ComputeGeometry(Area=area,Perimeter=perimeter,
> Centroid=centroid)
>
>   t_perimeter(r)=perimeter
```

```
> t_area(r-1)=area
> t_x_center(r)=centroid[0]
> t_y_center(r)=centroid[1]
> blob_siz(r)=blob_size[1]
>
> I get lots of values in Outverts, but area, perimeter etc. are all
> zero?
> Any ideas for the slightly incompetent...?
```

Humm, well, it must have something to do with what you are passing to isosurface. I have no problems with this code:

```
IDL> vol = loaddata(8)
IDL> minmax, vol
      0 232
IDL> isosurface, vol, 150, verts, conn
IDL> help, verts
      VERTS      FLOAT      = Array[3, 178729]
IDL> roi = obj_new('idlanroi', verts)
IDL> status = roi -> computegeometry(perimeter=p, area=a, centroid=c)
IDL> print, p
      361882.75
IDL> print, a
      5674.0855
IDL> print, c
      -35.847264      107.88590      42.979445
```

> BTW, nice to see you're still very active on this site.

"Active" is probably too strong a verb. Most of what is discussed here these days is over my head. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: is there a 3D equivalent of CONTOUR?
Posted by [dorth](#) on Tue, 13 Oct 2009 10:02:46 GMT
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On 8 Oct, 15:50, David Fanning <n...@dfanning.com> wrote:

```

> Dorth Wildenschild writes:
>> excellent, - but I can't get it to work.. not very good at working
>> with objects I'm afraid - I do it once every 3 years or so :-)
>
>> Here's what I do:
>
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>> pick one in a loop structure, representing "t" below
>
>>                                ISOSURFACE, label_image,
>> t, Outverts, Outconn
>>                                ;    print, outverts
>>                                Roi=Obj_New('IDLanROI', Outverts, type=2)
>
>>                                Status = Roi->
ComputeGeometry(Area=area,Perimeter=perimeter,
>> Centroid=centroid)
>
>>                                t_perimeter(r)=perimeter
>>                                t_area(r-1)=area
>>                                t_x_center(r)=centroid[0]
>>                                t_y_center(r)=centroid[1]
>>                                blob_siz(r)=blob_size[1]
>
>> I get lots of values in Outverts, but area, perimeter etc. are all
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> Humm, well, it must have something to do with what you are
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> IDL> minmax, vol
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> IDL> isosurface, vol, 150, verts, conn
> IDL> help, verts
>      VERTS      FLOAT      = Array[3, 178729]
> IDL> roi = obj_new('idlanroi', verts)
> IDL> status = roi -> computegeometry(perimeter=p, area=a, centroid=c)
> IDL> print, p
>      361882.75
> IDL> print, a
>      5674.0855
> IDL> print, c
>      -35.847264    107.88590    42.979445
>
>> BTW, nice to see you're still very active on this site.
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> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")- Hide quoted text -
>
> - Show quoted text -

Ok, so I need to step back and make sure I'm passing correct data to
isosurface.

Or bail and use Avizo Fire instead - oops perhaps I lose my right to
post here if I do that :-)

Thanks for helping, I'll give it another try.

Dorthe
