
Subject: Re: polygon intersection routine in IDL
Posted by [Weihua FANG](#) on Wed, 14 Feb 2007 11:36:06 GMT
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It works fine now.

Thank you

> In article <1171433274.480043.121...@q2g2000cwa.googlegroups.com>, "Weihua FANG"
<weihua.f...@gmail.com> writes:

>

>

>

>> Hi, dear mati,

>

>> I tested your function by 2 samples. One returned the overlap polygon

>> successfully. but the second one failed. is there anything wrong in my

>> code?

>

>> thank you in advance.

>

>> pro test_polygon_overlap

>

>> shape1 =3D fltarr(2,4)

>> shape2 =3D fltarr(2,4)

>> shape1[0,0] =3D 0.1

>> shape1[0,1] =3D 1.1

>> shape1[0,2] =3D 1.2

>> shape1[0,3] =3D 0.2

>> shape1[1,0] =3D 0.2

>> shape1[1,1] =3D 0.15

>> shape1[1,2] =3D 1.1

>> shape1[1,3] =3D 1.2

>

>> shape2[0,0] =3D 0.5

>> shape2[0,1] =3D 1.5

>> shape2[0,2] =3D 1.6

>> shape2[0,3] =3D 0.4

>> shape2[1,0] =3D 0.5

>> shape2[1,1] =3D 0.6

>> shape2[1,2] =3D 1.7

>> shape2[1,3] =3D 1.5

>

>> shape3 =3D shape_overlap (shape1, shape2, exists =3D exs)

>

>> print, exs

>

```

>> shape1 = 3D fltarr(2,17)
>> shape1 [*,0] = 3D [116.44991,41.441910]
>> shape1 [*,1] = 3D [116.57357,41.374821]
>> shape1 [*,2] = 3D [116.64723,41.312994]
>> shape1 [*,3] = 3D [116.57488,41.002544]
>> shape1 [*,4] = 3D [116.36967,40.928878]
>> shape1 [*,5] = 3D [116.16840,40.984128]
>> shape1 [*,6] = 3D [116.21576,41.053847]
>> shape1 [*,7] = 3D [116.06185,41.099889]
>> shape1 [*,8] = 3D [116.10263,41.168293]
>> shape1 [*,9] = 3D [116.13683,41.214334]
>> shape1 [*,10] = 3D [116.16577,41.264322]
>> shape1 [*,11] = 3D [116.18156,41.319572]
>> shape1 [*,12] = 3D [116.22891,41.344565]
>> shape1 [*,13] = 3D [116.31442,41.357720]
>> shape1 [*,14] = 3D [116.29337,41.387976]
>> shape1 [*,15] = 3D [116.34468,41.422178]
>> shape1 [*,16] = 3D [116.44991,41.441910]
>
>> shape2 = 3D fltarr(2,6)
>> shape2 [*,0] = 3D [116.21839,41.528731]
>> shape2 [*,1] = 3D [116.61698,41.524784]
>> shape2 [*,2] = 3D [116.72748,41.141984]
>> shape2 [*,3] = 3D [116.30916,41.203810]
>> shape2 [*,4] = 3D [116.13552,41.289316]
>> shape2 [*,5] = 3D [116.21839,41.528731]
>
>> xrange = 3D [116.06185 ,116.72748]
>> yrange = 3D [40.928879 ,41.528732]
>
>> plot, shape1[0,*], shape1[1,*], xrange = 3D xrange , yrange = 3D yrange
>> oplot, shape2[0,*], shape2[1,*]
>
>> shape3 = 3D shape_overlap (shape1, shape2, exists = 3D exs)
>
>> print, exs
>
>> end
>
> Well, thank you. I didn't use this routine for nearly a decade,
> didn't notice that it has a bug. OK, go to line 72 of the routine,
> the one which has a statement starting with
>
>     if Shape_area....
>
> And replace it with
>
>     if Shape_area(sec) lt 0 then sec = reverse(sec,2)

```

>
> Should work now, let me know if it doesn't
>
> Mati Meron | "When you argue with a fool,
> m...@cars.uchicago.edu | chances are he is doing just the same"-

>
