
Subject: Area intersection of two trapezoids with given coordinates

Posted by [mrosimmel](#) on Sat, 17 Nov 2007 02:44:51 GMT

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Hello all,

I was wondering if there is a function in IDL that I can find the intersection area of two trapezoids with given corner coordinates. Briefly I have two trapezoids where the first one has corners of (x1,y1), (x2,y2), (x3,y3), (x4,y4) and the second one has corners of (a1,b1), (a2,b2), (a3,b3), (a4,b4)...I know ARCGIS has such functions (like union/intersection).. If not could anyone have an idea how can I do it in IDL?

Thanks all,

Mario

Subject: Re: Area intersection of two trapezoids with given coordinates

Posted by [Vince Hradil](#) on Mon, 19 Nov 2007 03:22:44 GMT

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Can't this be solved analytically using trigonometry? If you want to do it numerically you could just make two masks using WHERE() then do AND to the get the intersection.

mrosim...@gmail.com wrote:

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>

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> intersection area of two trapezoids with given corner coordinates.

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> do it in IDL?

> Thanks all,

>

> Mario

Subject: Re: Area intersection of two trapezoids with given coordinates

Posted by [David Fanning](#) on Mon, 19 Nov 2007 03:27:57 GMT

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mrosimmel@gmail.com writes:

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> do it in IDL?

If these trapezoids have to do, for example, with
images, you can use POLYFILLV to get a list of
all the vertices inside them. Then you can perform
set operations on the vertices:

http://www.dfanning.com/tips/set_operations.html

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: Area intersection of two trapezoids with given coordinates

Posted by [David Fanning](#) on Mon, 19 Nov 2007 03:31:41 GMT

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David Fanning writes:

> If these trapezoids have to do, for example, with
> images, you can use POLYFILLV to get a list of
> all the vertices inside them. Then you can perform
> set operations on the vertices:
>
> http://www.dfanning.com/tips/set_operations.html

Read "indices" for "vertices". Too much hiking combined
with painting today. :-(

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: Area intersection of two trapezoids with given coordinates

Posted by [Bringfried Stecklum](#) on Tue, 20 Nov 2007 11:22:39 GMT

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mrosimmel@gmail.com wrote:

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> Thanks all,

>

> Mario

Dear Mario,

by accident I came across this page

http://www.mporzio.astro.it/~licausi/IDL_Library/lib_index.html

which seems to offer what you are looking for (OVERLAP.PRO).

regards,

Bringfried Stecklum

Subject: Re: Area intersection of two trapezoids with given coordinates

Posted by [mrosimmel](#) on Tue, 27 Nov 2007 17:21:43 GMT

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On Nov 20, 6:22 am, Bringfried Stecklum <steck...@tls-tautenburg.de>
wrote:

> mrosim...@gmail.com wrote:

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>

>> I was wondering if there is a function in IDL that I can find the

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> Dear Mario,
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> by accident I came across this page
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> http://www.mporzio.astro.it/~licausi/IDL_Library/lib_index.html
>
> which seems to offer what you are looking for (OVERLAP.PRO).
>
> regards,
>
> Bringfried Stecklum

Hi Bringfried,

Thank you very much for the web site.
I have been trying to write that script myself for almost two weeks.
The overlap.pro does exactly what I wanted with much better precision
than my own script.
Once again thanks everybody for your help.
Regards,

Mario
