Subject: Re: Is there a quick way to find the intersection of two lines?
Posted by eyuchen on Tue, 05 Feb 2008 08:24:33 GMT
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On Feb 4, 4:33 pm, "ben.bighair" <ben.bigh...@gmail.com> wrote:
> On Feb 4, 7:08 pm, eyuc...@gmail.com wrote:
>
>> Hi there,
>
>> I have two sets of x-y data:
>> x1=[1,2,3,4,5] y1=[3.2,7.4,8.2,9.3,7.9];
>> x2=[1.2,1.4,2.3,2.8,3.3,3.9,4.1,4.5,5.2]
>> y2=[3.1,5.2,6.2,7.3,7.5,8.6,9.6,8.7,7.4];
>
>> By running:
>> plot, x1, y1
>> oplot, x2, y2
>> we can clearly see that there are four intersections, but it is not
>> clear what are the x,y coordinates of these points.
>
>> Is there an easy way to do it? Thank you very much.
>
> Hi,
>
Thank you very much. I think I do understand how to find the
intersection of two lines in principle, but actually doing it requires
some details such as narrowing down the interval that the two lines
intersect, counting intersection points, allocating memory to store
the points and finally solving them.

I just wonder if there are pre-made subroutines, since this is really
a job we often do. If there are none, I'll try to make one...

> You might want to check out Paul Bourke's great online tidbits about
> geometry.
>
> http://local.wasp.uwa.edu.au/~pbourke/geometry/
>
> I have been chipping away at coding some of the algorithms he
> describes into IDL, but have been easily sidetracked. You're welcome
> to use what I have (mostly documented) as a starting point. My
> implementations come with zero warranty...
>
> www.tidewater.net/~pemaquid/pb.zip
>
> Cheers,
> Ben