Subject: Re: Point of intersection
Posted by Juggernaut on Wed, 30 Jul 2008 16:11:27 GMT
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On Jul 30, 11:55 am, Bennett <juggernau...@gmail.com> wrote:
> On Jul 30, 11:46 am, kishore1...@gmail.com wrote:
>
>
>
>> Hello,
>
>> I hope this is simple question for experienced guys.
>> How to find out perfect point of intersection of x value and
>> corresponding y value.
>> For example:
>> x1=[0.1,0.2,0.6,0.7]
>> x2=[0.5,0.4,0.5,0.3]
>> y=[1,2,3,4]
>> plot,x1,y,xran=[0.,0.8]
>> oplot,x2,y
>
>> In this, two plots are intersection at one point, how to find out that
>> particular interesection x and y value.
>
>> Thanking you,
>
>> Kishore
>
> Well if the y values are always equal like you have there then they
> will intersect where the x values are equal. Unless I'm thinking the
> wrong way? Which is entirely possible....

Think I may have jumped the gun there...what you really want to do since your dataset does not have any x that match (what I neglected to see because I'm not the brightest bulb) is to interpolate both your x's over a longer range and then find where they match within some error...like the following

```
x1_int = interpol(x1, 100)
x2_int = interpol(x2, 100)
location = where(abs(x1_int-x2_int) LT 0.001) ;- Where you can set
```

your error to whatever it is that you want..which I assume will depend on the degree to which you interpolate

For your case this gives the intersection to be 0.4666

Hope this helps get you in the right direction....as well as myself