Subject: Re: Point of intersection Posted by kishore1818 on Thu, 31 Jul 2008 13:42:35 GMT View Forum Message <> Reply to Message

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On Jul 30, 1:11 pm, Bennett < juggernau...@gmail.com> wrote:
> 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

Hi Bennett Thanks for nice suggestion.

Kishore