
Subject: Re: Beginner: Oplot line $t^{(-5/3)}$

Posted by [Helder Marchetto](#) on Mon, 12 Nov 2012 16:35:10 GMT

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On Monday, November 12, 2012 5:20:31 PM UTC+1, Charlie Paul D'auria wrote:

> Hi there!

>

>

>

> Please bear in mind that I am a complete IDL beginner so excuse any foolishness!

>

>

>

> I have managed to plot an XY graph with data plots.

>

>

>

> My problem lies with my next stage: I need to generate a line of gradient $t^{(-5/3)}$ (then use oplot over my data).

>

>

>

> I get the error 'Attempt to subscript T with I is out of range.' and when I type print,line I only get one value for my line...

>

>

>

> Here is some code I was provided with as a guide, which I have modified slightly:

>

>

>

> line=dblarr(9999)

>

> n=1E-4

>

> t=dblarr(9999)

>

>

>

> for i=0,9999 do begin

>

> t(i)=i

>

> line=n*t(i) ^{$-5/3$}

>

> endfor

>

>

>
> I have used 9999 as 1E+5 was apparently too large, or something..
>
>
>
> Any help would be much appreciated!!
>
>
>
> Charlie

I would do it like this (using double precision):

```
n=1d-4  
t=dindgen(9999)+1d ; starting from t=0 makes no sense, start from 1  
line=n*t^(-5d /3d)  
window, xsize=600, ysize=400 ; create a window for display  
plot, t, line, /ylog ; plot in y-log coordinates
```

Avoid loops, unless strictly necessary.

Cheers,
Helder
