
Subject: Re: IDL QUESTIONS (INTERPOLATION)

Posted by [David Fanning](#) on Mon, 21 Nov 2011 17:54:15 GMT

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zolile mtumela writes:

```
>
> Hi all,
> I have interpolated some data, which I think I did well, the data
> looks like this
>   time (s)    velocity
> 24785555    -8.90000
> ...
> I want to create time axis in hours, I need help on time conversion, I
> wrote a program like this
> File = Dialog_pickfile(Filter = '*.txt')
>
> ;read the data
> rows = File_lines(file)
> data = Fltarr(2,rows)
> openr,Lun,file,/Get_lun
> ReadF,lun, data
> b=floor(min(data[0,*])); start time
> e = ceil(max(data[0,*])); end time
> x = Scale_vector(Findgen(e-b+1),b,e)
> y = interpol(data[1,*], data[0,*],x); interpolating data
> ;draw the plots
> plot,data[0,*],data[1,*],linestyle=2    ; for original data
> oplot,x,y,color=120                    ; newly interpolated velocity data
>
> end
> I want to convert that time in two hour in the plot.
```

Maybe you want something like this:

```
rows = File_lines(file)
data = Dblarr(2,rows)
openr,Lun,file,/Get_lun
ReadF,lun, data
data[0,*] = data[0,*] - Min(data[0,*]) ; Elapsed time
b=floor(min(data[0,*])); start time
e = ceil(max(data[0,*])); end time
x = Scale_vector(Findgen(e-b+1),b,e)
y = interpol(data[1,*], data[0,*],x); interpolating data
;draw the plots
cgplot,data[0,*]/3600.,data[1,*], xtitle='Hours' ; for original data
cgplots,x/3600.,y,color='red', PSYM=3          ; newly interpolated
velocity data
```

end

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
