
Subject: Re: IDL QUESTIONS (INTERPOLATION)

Posted by [zolile mtumela](#) on Mon, 21 Nov 2011 18:50:36 GMT

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On Nov 21, 7:54 pm, David Fanning <n...@dfanning.com> wrote:

> 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
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:<http://www.idlcoyote.com/>
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")- Hide quoted text -
>
> - Show quoted text -

Thank you David it looks ok for time.

Based to data the y-axis(velocity axis), It plotted big values for y-axis but in my data there are no big values such as 500.

I am bit confused on resampling data, Is it necessary to resample data after interpolation.

In my program is any better way to use interpolation

Thank so much for ur tireless support and help

Many thanks

Zolile
