
Subject: Re: Help with data gaps and interpolation
Posted by [zolile mtumela](#) on Mon, 23 Mar 2015 07:33:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Friday, March 20, 2015 at 4:18:50 PM UTC+2, zolile...@gmail.com wrote:

> Dear All,
> I would to get help, sugestions on the ff program. i have tried many ways but I did not succed,
any help will be highly appreciated.

>
> 1. I want to plot with data gaps which are represented by values such as 9999.99.

>
> 2. I would like to interpolate the data again to fill the data gaps.

>
> the data look like this

>
>
> 06-10-2006 19:01:00.000 1.45000 -2.15000 0.120000
> 06-10-2006 19:02:00.000 1.36000 -2.31000 0.120000
> 06-10-2006 19:03:00.000 1.39000 -1.76000 0.140000
> 06-10-2006 19:04:00.000 9999.99 9999.99 9999.99
> 06-10-2006 19:05:00.000 9999.99 9999.99 9999.99
> 06-10-2006 19:06:00.000 1.20000 -1.91000 0.220000
> 06-10-2006 19:07:00.000 1.23000 -1.87000 0.230000
> 06-10-2006 19:08:00.000 1.22000 -1.84000 0.230000
> 06-10-2006 19:09:00.000 1.14000 -1.86000 0.310000
> 06-10-2006 19:10:00.000 1.05000 -1.86000 0.440000
> 06-10-2006 19:11:00.000 0.920000 -1.87000 0.660000
> 06-10-2006 19:12:00.000 0.790000 -1.60000 0.420000
> 06-10-2006 19:13:00.000 0.180000 -1.38000 0.810000
> 06-10-2006 19:14:00.000 0.900000 -0.970000 0.310000
> 06-10-2006 19:15:00.000 1.64000 -0.680000 -0.270000
> 06-10-2006 19:16:00.000 1.73000 -0.680000 -0.210000
> 06-10-2006 19:17:00.000 1.83000 -0.710000 0.0500000

>
> The program looks like this

>
> File = Dialog_PickFile(Filter='*.txt')

>
> Date_array = 0
> time_array = 0
> Bx_array = 0
> By_array = 0
> Bz_array = 0

>
> str = "
>
> openR, Lun, File,/Get_Lun
> readf, Lun, str

```

> while~eof(lun) do begin
>
>   readf,lun,date,time,Bx,By,Bz
>   ;print,date,time,Bx,By,Bz
>
>   Bx_array = [Bx_array, Bx]
>   By_array = [By_array, By]
>   Bz_array = [Bz_array, Bz]
> endwhile
> free_lun,lun
>   Bx_array=Bx_array[1:*]
>   By_array=By_array[1:*]
>   Bz_array=Bz_array[1:*]
>
>   index = where(Bx_array eq 9999.99, count)
>   if (count gt 9999.99) then Bx_array[index] = !values.f_nan
>
> ; interpolate
> if Bx_array lt 9999.99 then begin
>   temp=(Bx_array, count)
>   result=interpol(Bx_array[temp],temp, time[temp])
> endif
>
>   Nx = n_elements(Bx_array)
>   time = findgen(Nx)
>   time = time/60
>
>   ; plot with data gaps
>   plot, time, Bx_array[index];
>
> plot,time, Result
>
> end
>
> Thank in advance for your time.
> Zolile

```

Thank you so much Matthew for ur help. Thanks
