Subject: Re: How to handle gaps in plot?
Posted by Paul Van Delst[1] on Thu, 11 Aug 2005 16:40:59 GMT
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caitouer wrote:
> Thanks for your quick reply. It is true that it is easy when you have
> filled the gap with some values. However, I am trying to figure out
> how to plot when you do not fill the gap. Here is an example:
>
> X (time):[1,2,3,5,6,7,10,11,12,19,20,21,22,23,24]
> ;Hourly data in one day. There are several gaps in the data
> ;array. You do not know when you will have gap nor
> ; how large the gap is. The actual data is not so regular and
> ;huge. So it is not practical to fill the data.
>
> Y (some values):
> [1.1,0.9,1.3,1.6,2.1,0.7,2.3,0.1,0.3,0.6,0.9,1.4,1.3,1.7,1.8 ]
> ; these are the measurements you take at above time.
>
> Then when you type:
> plot,x,y
> There will have lines between the intervals. However, these lines are
> meaningless.
>
> I just want know if we plot the valid intervals only without those
> extra lines.

Ahh... so you don't actually have invalid data in these gaps, just irregularly spaced data. The simplest solution is to use the PSYM keyword to plot just symbols and no connecting lines at all (since the lines between the regular, hourly data are also meaningless... at least depending on the

variabiliy of your data).

Another option would be to create a regularly spaced array of x-data (based on yout x(time) data),

copy in the y-data to a simialrly spaced array and fill the y-data gaps with !values.d_nan. E.g.

```
IDL> x=dindgen(20)
IDL> y=dindgen(20)
IDL> y[5:8]=!values.d_nan
IDL> plot, x, y
```

Insty-gap in the data plot.

paulv

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Paul van Delst