Subject: Re: How to handle gaps in plot?
Posted by peter.albert@gmx.de on Fri, 12 Aug 2005 06:13:35 GMT
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Hi,

if you know a priori what the "good" interval should be, i.e. a threshhold for intervals between x values that marks gaps, you could identify those gaps and plot from one gap to the other using, please forgive me, evil for loops.

In your example, this threshhold would be 1 (hour), and the example code would look like this:

$$\begin{split} &\text{IDL> interval} = 1 \\ &\text{IDL> x=} [1,2,3,5,6,7,10,11,12,19,20,21,22,23,24] \\ &\text{IDL> y= } [1.1,0.9,1.3,1.6,2.1,0.7,2.3,0.1,0.3,0.6,0.9,1.4,1.3,1.7,1.8] \\ &\text{IDL> gap=} [-1,\text{where}(\text{shift}(x, -1)\text{-x ne interval}, n)] \\ &\text{IDL> plot, x, y, /nodata} \\ &\text{IDL> for i=} 0,n-1 \text{ do oplot, x[gap[i]+1:gap[i+1]], y[gap[i]+1:gap[i+1]], psym=-4} \end{split}$$

with the "shift" and "where" command I am checking where the interval between adjacent x values exceeds the threshhold. The values in the variable gap always give the last index of one connected x interval, so in the following oplot command I am plotting from gap[i]+1 to gap[i+1]. Therefore we need the -1 as the first element in gap.

Best regards,

Peter