Subject: Re: How not to plot blank/zero points?
Posted by Adam Solomon on Sun, 02 Aug 2009 19:47:18 GMT
View Forum Message <> Reply to Message

On Aug 1, 10:17 pm, pp <pp.pente...@gmail.com> wrote:
> On Aug 2, 12:50 am, Adam Solomon <rampa...@gmail.com> wrote:
>
>> I have an array (matrix, about 13 columns) of strings consisting of
>> numbers and blanks*. When I plot the data in each column, the blanks
>> get plotted as zeroes, so if I just plot points, things are OK (as
>> long as I start my plot range above 0), but if I want to connect the
>> points with lines then there are lines going to and from these blank
>> points.
>
>> How do I make IDL not plot these blank points (or points equal to 0)?
>> The only way I've found is by plotting in log (so the points don't
>> even show up) but for various reasons I'd rather not use log.
>
>> *If I were to do this as a floating point array, the blanks all become
>> 0.000, and that doesn't help.
>
> Saying your array is called data, here are 3 ways to do it:
>
> 1) Filter out the blanks, using where() to find the points you want,
> as in:
> iplot,data[where(data ne 0.0)]
> assuming the blanks are 0.0. If they are empty strings, as your
> descritpion suggests:
> iplot,data[where(data ne '')]
> or use whatever value the blanks happen to have in the argument of
> where()
>
> 2) If you want to plot only values in a certain range, use the
> min_value and/or max_value keywords:
> iplot,data,min_value=minv
> with minv of a proper value, higher than 0., and lower than the
> minimum you want to plot
>
> 3) Mark the points you do not want to plot with NaN, as in:
> data[where(data eq 0.0)]=!values.f_nan
> iplot,data
> Everything with a value of NaN is ignored by iplot.

Excellent!! I didn't try #1, but both #2 and #3 worked brilliantly.
Thanks.