
Subject: Re: Help w/Plotting

Posted by [Med Bennett](#) on Sat, 12 Jun 1999 07:00:00 GMT

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I think you need to make a yeararray of the same size as timearray where the first element is 1973.78 (or what ever fraction of a year your first date is) and increments by hour/(365.24*24), i.e., `yeararray = lindgen(55924)/(365.24 * 24) + startyear`. That way your year ticks will end up in the right places.

Anil Kochhar wrote:

```
> Hi,
>
> I have a graph of measurements vs time. Both my MeasurementArray and
> TimeArray have 55924 elements
> with measurements taken on the hour for 8 years (1973-1980). I would
> also like to
> indicate on the xaxis the years as they correspond to the time (i.e. After
> the first
> year's of data have 1973 on the x axis and so on)
> However I am having some trouble
> figuring out how to do this. I have tried using the axis procedure and
> graphing:
>
>     YearsArray = [1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980]
>     Plot, TimeArray, MeasurementArray
>     axis, xaxis = 0, xticks = 7, xtickn = YearsArray, xtitle =
> 'Yr', xcharsize = 0.9
>
> However, since measurements were only first collected in October 1973,
> dividing the xaxis
> into 8 even parts would not accurately relate the years to the
> Measurements.
>
> I also tried creating another array TimeArrayNew which has the year
> markers (i.e. 1973, 1974 etc)
> placed in the corresponding time slots:
>
>     YearsArray = [1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980]
>     YearIndex = where(TimeArray GT 365.86 and TimeArray LT 365.9,
> count)
>     print, 'Count: ', count
>     NumElem = n_elements(Final_Time)
>     TimeArrayNew = intarr(NumElem) ; Initialize Array of size NumElem
> to ZERO
>     TimeArrayNew(YearIndex) = YearsArray
>     Plot, TimeArray, MeasurementArray
>     axis, xaxis = 0, xticks = NumElem-1, xtickn = TimeArrayNew, xtitle
```

> = 'Yr',xcharsize = 0.9
>
> Note: NumElem equals 55924
> However this yields as an error b/c XTICKN can only have 60 elements:
> ERROR: %Keyword array parameter XTICKNAME must have from 1 to 60 elements.
>
> I'm looking for suggestions on can plot the measurements vs time while
> also indicating the
> corresponding Years along the X Axis:
>
> Thanks
> (please reply to my email address)
>
> p.s. Also could someone suggest a good IDL website for beginners
>
> anilk@mtolympus.ari.net
>
> "Internet or BUST !!"
