Subject: Re: Irregularly spaced tick-marks on secondary axis.
Posted by Ken Mankoff on Thu, 02 May 2002 12:55:17 GMT
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On Wed, 1 May 2002, Paul Van Delst wrote:
> FUNCTION wticks, axis, index, value
> wavelength = 10000.0d / value
> format = '(f5.2)'
> RETURN, STRING(wavelength, FORMAT = format)
> END
>
> PLOT, x, y, XSTYLE = 8
> AXIS, XAXIS = 1, $
> XRANGE = !X.CRANGE ,$
> XTICKV = 10000.0d/[10d, 11, 12, 13, 14, 15], $
> XTICKS = 5, $
> XSTYLE = 1, $
> XTICKFORMAT = 'wticks'
>
> As you can see, the above AXIS command assumes something about the
> XTICKV values. However, if I now decide to zoom into the plot such
> that the x-range falls between, say, 11 and 12 microns -- no
> wavelength scale is shown since XTICKV doesn't contain fractional
> wavelength values. Is there any way to get IDL to set "nice"
> wavelength values (via a dynamic XTICKV for e.g.) on the top scale
> based on the wavenumber range on the bottom scale?

Can't you make the inputs to XTICKV a function call (as you say, a
"dynamic XTICKV"), and use !X.CRANGE in that function?

This seems fairly straightforward, so if this is not the solution,
please clarify a bit...

The best analogy I can think of to your problem is "MAP_GRID", which
picks nice gridlines for global views (30 degrees) and also nice
gridlines for close-up views (every .001 degrees if the view small
enough). Is this what you are trying to achieve?

-k.
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