Subject: Multiple colors in one plot statement
Posted by eparvier on Wed, 07 Feb 1996 08:00:00 GMT
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Does anyone know of a way to get around the limitation that
the COLOR keyword for the PLOT command only takes a scalar?
I want to plot a bunch of points, with coordinates contained
in the vectors X and Y, but I want the color of each of the
points to correspond to information contained in another
vector Z (same length as X and Y, but scaled in value to
match the size of the color table of choice). Using the
command:

PLOT, X, Y, PSYM=2, COLORS=Z

doesn't work because COLORS can only be a scalar. The work-
around that I came up with involves having to plot each of
the individual elements one-by-one with a series of OPLOT
statements, setting the color individually. Is there a
separate keyword analagous to the C_COLORS in CONTOUR or
the SHADES keyword in SHADE_SURF, but for PLOT? Or is
there a command or routine that I'm not aware of that
will do what I want?

It would also be nice to be able to make each of the arrows
created by VELOVECT an aribitrary color described by a
separate color array all in one fell swoop instead of
using repeated calls to the routine.

Anyone have any ideas?

Thanks,
Frank

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Subject: Re: Multiple colors in one plot statement
Posted by Jackel on Thu, 08 Feb 1996 08:00:00 GMT
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In article <4fb1p2$cbp@peabody.colorado.edu> eparvier@stripe.Colorado.EDU (Eparvier
Francis) writes:

> Does anyone know of a way to get around the limitation that
> the COLOR keyword for the PLOT command only takes a scalar?

From the version 4.0.1 help
"The PLOTS procedure plots vectors or points on the current graphics device in
either two or three dimensions. The coordinates can be given in data, device,
or normalized form using the DATA (the default), DEVICE, or NORMAL keywords.

The COLOR keyword can be set to a scalar or vector value. If it is set to a vector value,
the line segment connecting (Xi, Yi) to (Xi+1, Yi+1) is drawn with a color
index of COLORi+1. In this case, COLOR must have the same number of elements
as X and Y."
So you might try making the plot area, then using PLOTS to draw the points.

> It would also be nice to be able to make each of the arrows
> created by VELOVECT an aribitrary color described by a
> separate color array all in one fell swoop instead of
> using repeated calls to the routine.

VELOVECT is a user contributed routine, so the source is available to change,
or you could write a wrapper routine (VELOVECTS?) which looped for you.

Brian Jackel
University of Western Ontario

Subject: Re: Multiple colors in one plot statement
Posted by paul on Thu, 08 Feb 1996 08:00:00 GMT
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In article <4fb1p2$cbp@peabody.colorado.edu>, eparvier@stripe.Colorado.EDU (Eparvier
Francis) writes:
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|> match the size of the color table of choice).

PLOTS will accept and use a vector valued color.

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