Subject: Re: 3d plot help?
Posted by Eric Vella on Tue, 17 Aug 1999 07:00:00 GMT
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I have used this type of plot in other programs, where it was called a
"lego" plot. Sure enough, IDL's Surface plot has a LEGO keyword. You might
try it.

Peter Clinch wrote:

```
> I have a 3d data set I want to graph, but the manuals are going in one
> eye and out the other after a day's programming to actually get the data
> in the first place...  any help would thus be appreciated!
>
> The basic data consists of discrete points which will plot somewhere in
> a circular field to show where each point goes.  The value of the data
> will be represented by a vertical bar, so in dodgy ASCII art, summat
> like this...
>
>        |a
>        |      /  |c
>        |     /   |
>    x _________/__________
>           /
>          /
>         /    |b
>         y
>
> so point a is value 3 in the -ve x, +ve y quadrant, b is value 1 in the
> +ve x, -ve y quadrant, point c is value 2 in the x,y +ve quadrant, and
> so on.
>
> The points are discrete, so surface/contour plotting isn't applicable.
> Any pointers? (sorry if, as usual, I'm overlooking the staggeringly
> obvious...).
>
> thanks, Pete.
> --
> Peter Clinch                    University of Dundee
> Tel 44 1382 660111 ext. 33637   Medical Physics, Ninewells Hospital
> Fax 44 1382 640177              Dundee DD1 9SY Scotland UK
> net p.j.clinch@dundee.ac.uk     http://www.dundee.ac.uk/~pjclinch/
```

Subject: Re: 3d plot help?
Posted by davidf on Tue, 17 Aug 1999 07:00:00 GMT
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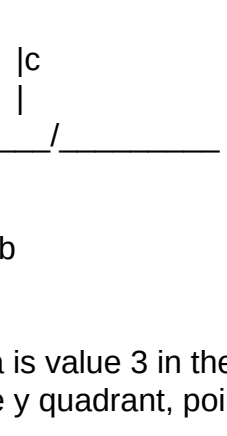
Peter Clinch (p.j.clinch@dundee.ac.uk) writes:

> I have a 3d data set I want to graph, but the manuals are going in one
> eye and out the other after a day's programming to actually get the data
> in the first place... any help would thus be appreciated!
>
> The basic data consists of discrete points which will plot somewhere in
> a circular field to show where each point goes. The value of the data
> will be represented by a vertical bar, so in dodgy ASCII art, summat
> like this...
>
>


>
> so point a is value 3 in the -ve x, +ve y quadrant, b is value 1 in the
> +ve x, -ve y quadrant, point c is value 2 in the x,y +ve quadrant, and
> so on.
>
> The points are discrete, so surface/contour plotting isn't applicable.
> Any pointers?

I think you want something like a 3D scatterplot with
the axes going through the origin. You can probably
figure it out faster than I can write it from these
two articles:

http://www.dfanning.com/tips/scatter3d.html
http://www.dfanning.com/tips/surface_axes_origin.html

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: 3d plot help?
Posted by Struan Gray on Tue, 17 Aug 1999 07:00:00 GMT
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Peter Clinch, p.j.clinch@dundee.ac.uk writes:

> The points are discrete, so surface/contour plotting
> isn't applicable. Any pointers? (sorry if, as usual,
> I'm overlooking the staggeringly obvious...).

Draw the lines yourself. :-)

In direct graphics use PLOTS, which must have seemed like a staggeringly obvious name to someone somewhere. In object graphics a single IDLgrPolyline object will do the trick if you set up the connectivity array (POLYLINES) correctly.

I reckon you owe me a walking pole.

Struan