Subject: polar surface plots
Posted by sean on Fri, 23 Feb 1996 08:00:00 GMT
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For 1-d data you can do a
 plot, /polar, r, theta

Is there a similar trick for
 surface, /polar, f(i,j), r, theta
?

Checked the help, but can't see anything.

If not, has anyone got a .pro available which will do the necessary
interpolation onto a Cartesian grid?

Cheers

 sean@math.ucl.ac.uk

Subject: Re: polar surface plots
Posted by Mike Mayer on Mon, 26 Feb 1996 08:00:00 GMT
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Whoops, sorry kids...

I meant to send that last response about spherical surface plotting
to the poster via Email only. It also wound up in the newsgroup by
mistake. Maybe it will help others though.

Mike

--
^v^v^v^v^v^v^v PV-WAVE: Where it's @! http://www.vni.com ^v^v^v^v^v^v^v^v^
Michael Mayer, Senior Technical Support Engineer   Amateur Radio KB8RJO
Visual Numerics, Inc. 32915 Aurora Rd. Suite 160, Solon OH 44139 USA
Email: mayer@boulder.vni.com   Human: 216-248-4900   Fax: 216-248-2733
v^v^v^v^v^v^v^v^v^v Good * Cheap * Quick (pick any two) ^v^v^v^v^v^v^v^v^v

Subject: Re: polar surface plots
Posted by Mike Mayer on Mon, 26 Feb 1996 08:00:00 GMT
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Sean Oughton wrote:
>

> For 1-d data you can do a
> plot, /polar, r, theta
>
> Is there a similar trick for
> surface, /polar, f(i,j), r, theta
> ?
>
> Checked the help, but can't see anything.
>
> If not, has anyone got a .pro available which will do the necessary
> interpolation onto a Cartesian grid?
>

Sean,

Not sure if you are using IDL or PV-WAVE. If PV-WAVE, check
out the routines CONV_TO_RECT and CONV_FROM_RECT. They allow
you to convert back and forth between cartesian, spherical,
polar, and cylindrical coordinates. For doing spherical surfaces,
you could convert to cartesian and do a regular surface plot, similar
to your example above (except that the lines will still be drawn
rectilinearly insted of radially/concentrically).

Some of WAVE's advanced rendering techniques let you render
a spherical surface, from spherical data. Check out POLY_SPHERE
GRID_SPHERE, POLYSHADE, SPHERE, and RENDER. There are several
useful related routines, but these should get you started.

I hope this helps.

Mike

--
^v^v^v^v^v^v^v PV-WAVE: Where it's @! http://www.vni.com ^v^v^v^v^v^v^v^v^
Michael Mayer, Senior Technical Support Engineer Amateur Radio KB8RJO
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v^v^v^v^v^v^v^v^v^v Good * Cheap * Quick (pick any two) ^v^v^v^v^v^v^v^v^v

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Subject: Re: polar surface plots
Posted by Sergei Senin on Tue, 27 Feb 1996 08:00:00 GMT
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Mike Mayer <mayer@boulder.vni.com> wrote:
> Whoops, sorry kids...

Don't be, we, kids, do like wise guys hanging around :-)

> I meant to send that last response about spherical surface plotting
> to the poster via Email only. It also wound up in the newsgroup by
> mistake. Maybe it will help others though.
>
> Mike

It is always a good idea to post your reply to the newsgroup - as you say it might help others.

Cheers

> ^v^v^v^v^v^v^v PV-WAVE: Where it's @! http://www.vni.com ^v^v^v^v^v^v^v^v^
> Michael Mayer, Senior Technical Support Engineer Amateur Radio KB8RJO
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> v^v^v^v^v^v^v^v^v^v Good * Cheap * Quick (pick any two) ^v^v^v^v^v^v^v^v

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