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

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^v^v^v^v^v^v^v PV-WAVE: Where it's @! http://www.vni.com ^v^v^v^v^v^v^v^v^
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