Subject: Re: cylindrical mapping
Posted by Chris Rennie on Fri, 29 Oct 1999 07:00:00 GMT
View Forum Message <> Reply to Message

> Chris Rennie <rennie@physics.usyd.edu.au> wrote:
>> Can anyone suggest a shortcut for plotting a timeseries in
>> cylindrical coordinates? I would like to plot a phase angle
>> as a function of time (which is to be the axial coordinate),
>> and would like to try this representation.
>
> I did not quite understand what is plotted vs. what and
> in what coordinate system. Can you elaborate?
>
> Mirko

Sure.
I have a phase angle (-Pi .. +Pi) as a function of time.
A flat 2D plot is somewhat unsatisfactory if the data
frequently 'wraps around' from -Pi and +Pi, and so I
was curious to see the data mapped onto a cylinder.

I can create a 3D version of the time series from Times[]
and Phase[] by:
Phase3d[0,*]=Times
Phase3d[1,*]=sin(Phase)
Phase3d[2,*]=cos(Phase)

and view the result from various angles. But I am hoping
that someone out there has done the harder work of supplying
axes, hidden line removal, or imaginative shading etc. Such
plots are hard to visualize without additional depth cues.
If you have any ideas, please let me know...
Chris