
Subject: 3D plot in spherical coordinates

Posted by [knight](#) on Tue, 28 Jan 1992 18:54:00 GMT

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I would like solutions to plotting a surface defined in spherical coordinates.

For example, I want to make a plot of the surface z defined by

$$z = 1. + \sin^2(\theta) \cos(\phi)$$

where

θ = polar angle

ϕ = azimuthal angle.

I considered a transformation from spherical to Cartesian coordinates and then a surface plot, but hidden line removal suffers (see note under surface in Appendix B of IDL User's Guide). I would like something that has the versatility of surface, e.g., the arbitrary viewing direction.

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