
Subject: Polar to spherical coordinates

Posted by [pford](#) on Mon, 24 Apr 2000 07:00:00 GMT

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Greetings:

I have a problem that is screaming at me that there must be a simpler solution in IDL than I have devised. I am attempting to relearn IDL, after months of being away from it, and the math after decades from it and I have not found a built-in procedure that does the trick.

The problem in its, simplest form, is that I want to take a 2-D polar plot and transform it into a 3-D hemisphere and vice versa. More accurately, a polar plot to a 3-D hemi-ellipsoid with varying axes and thickness, i.e. more than just a surface plot. The manner that I am thinking how to do this is to sample the polar plot along its radius and map it to the hemisphere(with for loops). It seems to me that this is likely common in IDL to map from polar to spherical coordinates and to warp shapes. Since I don't wish to reinvent the wheel, and not a good wheel at that, I would appreciate being pointed in the right direction.

Thank you,

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