
Subject: Re: how to define theta and phi of a sphere in IDL

Posted by [penteado](#) on Sun, 15 Nov 2009 06:20:47 GMT

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On Nov 15, 3:33 am, nisha katyal <nishahans...@gmail.com> wrote:

> No, actually i do not want to define it that way. I want to define

> x,y,z coordinates in terms of r,theta,phi. i.e

> $x=r*\sin(\theta)\cos(\phi)$

> $y=r*\cos(\theta)\sin(\phi)$

> $z=r*\cos(\theta)$

>

> I don not know the difference in defining theta and phi....

Don't you mean $y=r*\sin(\theta)\sin(\phi)$? If so, theta is the angle from the north pole to the parallel where your point is (90° -latitude), and phi is the longitude. And David was saying that this conversion could be done as

`xyz=cv_coord(from_sphere=[phi,!dpi/2d0-theta,r],/to_rect)`
