
Subject: Re: area enclosed by a poylgon on a sphere
Posted by [Nick Bower](#) on Tue, 03 Aug 1999 07:00:00 GMT

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> I need to be able to find the area enclosed by an arbitrarily shaped
> series of lat/lon points on the surface of the Earth. I have been told
> that I can solve this using Green's Theorem, but before I gut through
> the math I was hoping that someone would have solved this and be willing
> to share the code. If it is already in IDL that would be great, but any
> language will do.

What does area in lat's and lon's mean? Since there is no unique "square lat/lon" area unit, you'd have to use a projection at some point I would guess. Don't have any code then for the area - always used ArcView for this type of thing. But maybe it's possible to project, pick a point inside a *convex* polygon, connect it with each vertex and find the summed area of triangles. You'd end up with an area, but it's specific to your spheroid/projection pair. Sorry if it's not what you're after, as there's a real chance you won't have a convex shape.

nick

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