Subject: Re: Finding distance with longitude and latitude
Posted by seanelvidge on Mon, 15 Apr 2013 11:13:25 GMT
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> Now I am trying to find the distance between longitude and latitude points using the vincenty formula form here: http://en.wikipedia.org/wiki/Great-circle_distance. I have completed this and I am getting logical answers I am just wondering if it is accurate or a correct.
>

Vincenty's formula is the traditional approach to solving geodesic problems on an ellipsoid. However this method can fail under certain conditions, one of which being for near antipodal points.

However recently, Karney described a more accurate, robust and quicker solution to this problem using Newton's Method. (Described in his paper 'Algorithms for Geodesics' http://link.springer.com/content/pdf/10.1007%2Fs00190-012-05 78-z).

On Karney's site he has implementations of this for C++, C, Fortran, Python, Javascript and Matlab. In adition he provides an online calculator (http://geographiclib.sourceforge.net/cgi-bin/GeodSolve).

If you would like to use our IDL implementation of Karney's solution to this problem you can download it here: http://seanelvidge.com/wp-content/uploads/2013/04/inverse_ge odesic.pro