
Subject: Re: how to calculate distance from pairs of latitude/longitude measurements?

Posted by [natha](#) on Wed, 11 Mar 2009 20:21:21 GMT

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I tried the following formula I found in your link:

Distance between points

The great circle distance d between two points with coordinates $\{\text{lat1}, \text{lon1}\}$ and $\{\text{lat2}, \text{lon2}\}$ is given by:

$$d = \arccos(\sin(\text{lat1}) \cdot \sin(\text{lat2}) + \cos(\text{lat1}) \cdot \cos(\text{lat2}) \cdot \cos(\text{lon1} - \text{lon2}))$$

A mathematically equivalent formula, which is less subject to rounding error for short distances is:

$$d = 2 \cdot \arcsin(\sqrt{(\sin((\text{lat1} - \text{lat2})/2))^2 + \cos(\text{lat1}) \cdot \cos(\text{lat2}) \cdot (\sin((\text{lon1} - \text{lon2})/2))^2})$$

the result is 0.8777. 0.8777 distance from montreal to albany ????

Doesn't work !
