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Subject: Re: Finding distance with longitude and latitude  
Posted by [wlandsman](#) on Sun, 14 Apr 2013 23:49:07 GMT

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On Sunday, April 14, 2013 7:45:40 PM UTC-4, wlandsman wrote:

> On Sunday, April 14, 2013 7:22:44 PM UTC-4, gpet...@ucsc.edu wrote:

>  
>  
>  
>> a=sqrt((cos(lat2)\*sin(dlon))^2 + (cos(lat1)\*sin(lat2)-sin(lat1)\*cos(lat2)\*cos(dlon))^2)/(sin(lat1)\*sin(lat2)+cos(lat1)\*cos(lat2)\*cos(dlat))  
>

>  
>  
>  
> c= atan(a)  
>  
>  
>

> The Wikipedia article you quote says

>  
> "When programming a computer, one should use the atan2() function rather than the ordinary arctangent function (atan()), in order to simplify handling of the case where the denominator is zero, and to compute \Delta\widehat{\sigma}\! unambiguously in all quadrants"

I accidentally hit SEND too soon, but you want to use the two argument form of ATAN, e.g.

c = atan( numerator, denominator)

--Wayne

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