
Subject: Re: Finding distance with longitude and latitude
Posted by [wlandsman](#) on Mon, 15 Apr 2013 02:38:26 GMT
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IDL doesn't have an ATAN2 function. Instead, you call ATAN with two arguments. Look at the online help for ATAN

On Sunday, April 14, 2013 9:17:41 PM UTC-4, gpet...@ucsc.edu wrote:

> On Sunday, April 14, 2013 4:49:07 PM UTC-7, wlandsman wrote:

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

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

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

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>>> $c = \text{atan}(a)$

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>>> The Wikipedia article you quote says
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>>> "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"
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>> I accidentally hit SEND too soon, but you want to use the two argument form of ATAN, e.g.
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>> c = atan( numerator, denominator)
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>> --Wayne  
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> When ever i tried to use atan2() it said that the variable was undefined. I dont know why that  
would happen
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