
Subject: Re: Find pixel based on latitude/longitude.
Posted by [Craig Markwardt](#) on Thu, 26 Jan 2012 06:53:10 GMT
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On Jan 25, 10:37 pm, David Fanning <n...@dfanning.com> wrote:
> Daniel Otis writes:
>> This is a very basic question, but I am struggling to find a good
>> solution. I have image arrays and want to find a pixel and a line
>> value based on a latitude and a longitude.
>
>> For example, a global SST array is 2D (8640x4320). I have a 1D array
>> of latitudes(4320) and 1D array of longitudes(8640). Based on depth
>> and other considerations, I have a latitude value and a longitude
>> value where I want to extract data and I need to find the closest
>> pixel.
>
>> I can't use a WHERE command because my desired lat/lon values don't
>> exactly correspond to those in the lat/lon arrays. I just want to find
>> the closest pixel in the 2D array based on the lat and lon that I
>> provide.
>
>> This seems simple, but I have not been able to find a good solution.
>> Any ideas are appreciated. Thanks.
>
> latindex = Value_Locate(lats, mylat)
> lonindex = Value_Locate(lons, mylon)
> valueIwant = image[lonindex, latindex]

David's method is "nearest neighbor" interpolation. If you want to get slightly fancier, use linear interpolation with INTERPOLATE().

Craig
