Subject: Re: subset a 2d array
Posted by xiao zhang on Thu, 14 Aug 2008 16:46:57 GMT
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On Aug 14, 11:34 am, David Fanning <n...@dfanning.com> wrote:
> xiao writes:
>> Sorry David, I still got problems here. I printed out all the values
>> in the array and i found the center value which is -28.0011 but when I
>> tried to do this :
>
>> index=where(lat eq -28.0011,count)
>> xy = array_indices(lat, index[0])
>> subarray = lat[xy[0]-400:xy[0]+400, xy[1]-400:xy[1]+400]
>
>> It cannot find the index number...Why is that? Thank you?
>> PS :THIS ARRAY IS A FLOAT ARRAY.
>
> Yeah, I thought I would let you solve one problem
> at a time. :-)
>
> The "problem" is that computers cannot represent numbers
> "exactly". At least most numbers they can't. (They do
> a reasonable job with integers. :-)
>
> http://www.dfanning.com/math_tips/sky_is_falling.html
> http://www.dfanning.com/math_tips/razoredge.html
>
> Typically, if we are looking for floating values, we
> have to add/subtract a small "delta" to the number
> to be able to find it. How big should the delta be?
> Big enough to allow you to find the number you are
> looking, but not too big to add ambiguity to your
> search. You could try something like this, for example"
>
> delta = 1e-3
> index = Where(array GE (2.5-delta) AND array LE (2.5+delta), count)
>
> Or, if you are just looking for the center of the array, you
> could always do this:
>
> s = Size(array, /Dimensions)
> xcenter = s[0]/2
> ycenter = s[1]/2
> targetValue = array[xcenter, ycenter]
>
> Cheers,
>
> David

>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming (www.dfanning.com)
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

haha, it works , thank you David~ :)
