Subject: Re: Matching Lats and Lons from two arrays
Posted by Juggernaut on Tue, 26 Aug 2008 17:29:49 GMT
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On Aug 26, 1:07 pm, Jean H <jghas...@DELTHIS.ucalgary.ANDTHIS.ca>
wrote:
> pgri...@gmail.com wrote:
>> Would something like this work for sorted x (plus some fix for first
>> and last element)?
>> There's going to be an overhead for sorting x if not already sorted
>> however.
>
>> x=[3,3.5,4,6.5,7]
>> y=[3.4, 3.0, 6.8, 6.3]
>
>> a=value_locate(x,y)
>> result=a+((y-x[a]) GT (x[a+1]-y))
>> print,result
>
>> Ciao,
>> Paolo
>
> this would work if you only have 1 coordinate (latitude), not with 2
> (lat,long)...
> Jean
>
>
>
>> Brian Larsen wrote:
>>> I have tried this on several occasions (for a little different
>>> application but I think its the same) and have had no luck eliminating
>>> the for loop, so I just wrote it in a function to hide it from
>>> myself. This is my try at this based on value locate:
>>> http://people.bu.edu/balarsen/Home/IDL/Entries/2008/1/7_roun d2array_(...
>
>>> If others know how to eliminate the for loop that would be fantastic.
>
>>> Cheers,
>
>>> Brian
>
>>> ---------- ----------
>>> Brian Larsen
>>> Boston University
>>> Center for Space Physics
>>> http://people.bu.edu/balarsen/Home/IDL

You could just do them simultaneously and only take the intersection

of the values....
```
for i = 0, ncols-1 do begin
  x2 = rebin(reform(dlat[i,*],nrows),nrows,nels)
  x3 = rebin(reform(CS_LATLON,1,nels), nrows,nels)
  indices = where(abs(x3-x2) LT 1e-4)
  vals = x2[indices]
  x2 = rebin(reform(dlon[i,*],nrows),nrows,nels)
  x3 = rebin(reform(CS_LATLON,1,nels), nrows,nels)
  indices2 = where(abs(x3-x2) LT 1e-4)
  vals = x2[indices2]
  intersecting = setintersection(indices,indices2)
endfor
```

Couldn't you?
