
Subject: Re: Georeferencing Errors

Posted by [K. Bowman](#) on Tue, 02 Nov 2004 20:07:37 GMT

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In article <ce4903f3.0411021020.112e251f@posting.google.com>,
will.mccarty@msfc.nasa.gov (Will McCarty) wrote:

```
> OK, I've posted on this before, and this time I'm using a bit of a
> more common dataset (GTOPO30 terrain elevation), but getting similar
> geolocation errors. Thus I'm interested in seeing what (if anything)
> you guys can come up with. I use the following code:
>
> --test_lat_lon.pro
> ulx = -99.995833333333334
> uly = 39.995833333333333
> dx = 0.008333333333333
> dy = 0.008333333333333
>
> lat = fltarr(4800,6000)
> lon = lat
> for i = 0, 4799 do begin
>   for j = 0, 5999 do begin
>     lat[i,j] = uly - dy*j
>     lon[i,j] = ulx + dx*i
>   endfor
> endfor
```

I don't have the data set, but you might try

```
ulx = -99.995833333333334D0
uly = 39.995833333333333D0
dx = 0.008333333333333D0
dy = 0.008333333333333D0
```

```
lat = DBLARR(4800,6000)
```

As it is, you are not getting the precision you think you are.

Or, it might be a pixel corner/center thing.

Ken Bowman

Subject: Re: Georeferencing Errors

Posted by [mperrin+news](#) on Tue, 02 Nov 2004 20:57:45 GMT

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Will McCarty <will.mccarty@msfc.nasa.gov> wrote:

If you really care about that many significant figures, you need to declare these as doubles, not floats:

- Marshall

```
> lat = fltarr(4800,6000)
> lon = lat
> for i = 0, 4799 do begin
>   for j = 0, 5999 do begin
>     lat[i,j] = uly - dy*j
>     lon[i,j] = ulx + dx*i
>   endfor
> endfor
```

http://www.dfanning.com/tips/rebin_magic.html

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David

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David W. Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Phone: 970-221-0438, IDL Book Orders: 1-888-461-0155

Subject: Re: Georeferencing Errors

Posted by [Kelly Dean](#) on Thu, 04 Nov 2004 05:31:59 GMT

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The FOR FOR...ENDFOR ENDFOR will allow you to drink some coffee, but the MAP_PATCH operation with this image will allow you to get a tennis match in. IDL's PolyWarp and Poly_2D will get the remapping done in minutes.

Kelly Dean

Colorado State University

Fort Collins, Colorado

David Fanning wrote:

> Will McCarty writes:

>

>> lat = fltarr(4800,6000)

>> lon = lat

>> for i = 0, 4799 do begin

>> for j = 0, 5999 do begin

>> lat[i,j] = uly - dy*j

>> lon[i,j] = ulx + dx*i

>> endfor

>> endfor

>

> Those other guys probably solved your problems,

> but I would have another look at the Dimension

> Juggling Tutorial unless you *like* sitting

> around for hours drinking coffee. :-)

>

> http://www.dfanning.com/tips/rebin_magic.html

>

> Cheers,

>

> David

> --

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