Subject: Re: image interplate and overlay lat/lon?
Posted by beardown911 on Wed, 22 Aug 2012 17:13:46 GMT

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On Wednesday, August 22, 2012 10:57:48 AM UTC-5, go cats wrote:
> Hello all,
>
>
>
> My goal is to take an image(s) and overlay geographic lat/lon information onto the image. I
have lat/lon information of four boundaries and tried to create a regular grid using them.
>
>
>
> I've used David's code to generate a regular lat/lon grid, and tried to interpolate image
with gridded lat/lon data.
>
>
>
> However, outImage looks blank and only geographin lat/lon data are shown with 0 image pixel
values. I am working on 8-bit tif images.
>
>
>
> Would anybody give me some tips how to make this work or what I did wrong?
>
>
>
> Thanks in advance,
>
> Kim
>
>
>
> P.S. Below is what I've been working on.
>
> ;--
>
> ; image(0,0)locates at the upper left corner
>
>   xOrigin = maxLon
>
>   yOrigin = maxLat
>
>
>
>   xscale = (maxLon – minLon)/nS
>

```
>     yscale = (maxLat – minLat)/nL
>
>
>
>     uvec = Findgen(nS) * xscale + xOrigin
>
>     vvec = yOrigin - (Findgen(nL) * yscale)
>
>
>
>     uarray = Rebin(uvec, nS, nL)
>
>     varray = Rebin(Reform(vvec, 1, nL), nS, nL)
>
>
>
>  outImage = Interpolate(inImage, varray, uarray)
>
> .
>
> .
>
> .
>
> geoTag = { $
>
>        ModelTiepointTag: [0.0, 0.0, 0.0, xOrigin, yOrigin, 0.0], $
>
>        ModelPixelScaleTag: [xscale, yscale, 0.0], $
>
>        GTModelTypeGeoKey: 2, $ ; (ModelType Geographic)
>
>        GTRasterTypeGeoKey: 2, $ ; (RasterPixelIsPoint)
>
>        GeographicTypeGeoKey: 4326 $ ; (WGS84)
>
>        }
>
> .
>
> .
>
> WRITE_TIFF, outImage, GEOTIFF = geoTag
>
> ;----------------------------------------------------
```

Thanks David for your prompt answer and guide.
Yes, as you pointed, no interpolate is needed for the input image.

Image array and lat/lon grids have the same size.

I'll read through "Map Structures" and try it.

Thank you again and have a nice day!

Kim