
Subject: Re: get LAT/LON from georef image
Posted by [titan](#) on Thu, 12 Feb 2009 10:03:51 GMT
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On Feb 11, 8:08 pm, David Fanning <n...@dfanning.com> wrote:

> titan writes:
>> Could this article be used even if my image is not a GEOTIFF image?
>
> If you have map projection information, and you know
> the location of one corner (or center, I guess) of
> your image, yes.
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

I have another idea and I would like to know if you think it's correct.

Considering the answer of Jean H. I realize that I could still use the ENVI routine ENVI_CONVERT_FILE_COORDINATES but in a "handcrafted" way:

;; transform the number of sample and line in integer value

```
ns_int = fix(img_ns) ;lat  
nl_int = fix(img_nl) ;lon
```

;; Jean H. suggests that every pixel should be defined by a couple of values so I have to determine who between ns_int and nl_int is the biggest value

```
IF (ns_int GT nl_int) THEN BEGIN
```

;; once the higher value has been defined, I could create two vector of the same length

```
  x_coord=indgen(fix(img_ns))  
  y_coord=indgen(fix(img_ns))
```

;; and now I can use the ENVI routine

```
ENVI_CONVERT_FILE_COORDINATES,img_fid_open,x_coord,y_coord,lat_map,lon_map,  
TO_MAP
```

;; in order to obtain the correct dims again and knowing that, in this case, vector of ns (lat) is bigger than the vector of nl (lon) I have to cut this one to its original dimension

```
  lon_map=lat_map[0:img_nl-1]
```

:: if, on the contrary, integer value of nl (lon) is bigger than the
the one of ns (lat)
:: the procedure considers two vectors of the same dims vector of ns
has

```
ENDIF ELSE BEGIN
  IF (nl_int GT ns_int) THEN $
    x_coord=indgen(fix(img_nl))
    y_coord=indgen(fix(img_nl))
```

```
ENVI_CONVERT_FILE_COORDINATES,img_fid_open,x_coord,y_coord,lat_map,lon_map,/
TO_MAP
```

:: and now the vector to be cut is the one of latitude

```
lat_map=lat_map[0:img_ns-1]
```

```
ENDELSE
```

:: finally we have the two vector of lat and lon and we can also can
create a matrix of lat lon with the same dims of our image

```
matrix_coord=dblarr(fix(img_ns),fix(img_nl))
matrix_coord = [lat_map,lon_map]
```

David or Jean H. what do you think about this procedure?
thanks

Bartolomeo (alias Titan)
