
Subject: GeoTIFF help - conversion to lat/lon
Posted by [rjp23](#) on Fri, 16 Jun 2017 08:32:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm hoping someone can help as the GeoTIFF format is confusing me somewhat.

I'm following David's excellent tutorial at http://www.idlcoyote.com/map_tips/tiffoverlay.html

However, my GeoTIFF is missing some of the geotag information that David uses in his example.

I don't have the variables to do this bit:

```
; Map the corners in lat/lon space by inverse transformation.
alberMap = MAP_PROJ_INIT('Albers Equal Area Conic', $
    DATUM=8, $ ; WGS84
    CENTER_LAT=geotag.PROJNATORIGINLATGEOKEY, $
    CENTER_LON=geotag.PROJNATORIGINLONGGEOKEY, $
    STANDARD_PAR1=geotag.PROJSTDPARALLEL1GEOKEY, $
    STANDARD_PAR2=geotag.PROJSTDPARALLEL2GEOKEY)
lonlat = MAP_PROJ_INVERSE([xOrigin, xOrigin, xEnd, xEnd], $
    [yOrigin, yEnd, yEnd, yOrigin], $
    MAP_STRUCTURE=alberMap)
```

And I can't work out what the equivalent is with what I have:

```
IDL> help, geotag
** Structure <637638>, 18 tags, length=184, data length=158, refs=1:
MODELPIXELSCALETAG
    DOUBLE  Array[3]
MODELTIEPOINTTAG
    DOUBLE  Array[6, 1]
GTMODELTYPEGEOKEY
    INT      1
GTRASTERTYPEGEOKEY
    INT      1
GTCITATIONGEOKEY
    STRING   'Projected Coordinates |'
GEOGRAPHICTYPEGEOKEY
    INT      4326
GEOGCITATIONGEOKEY
    STRING   'WGS84'
GEOGGEODETICDATUMGEOKEY
    INT      6326
GEOGPRIMEMERIDIANGEOKEY
    INT      8901
GEOGLINEARUNITSGEOKEY
    INT      9001
GEOGANGULARUNITSGEOKEY
```

```
        INT      9102
GEOGELLIPSOIDGEOKEY
        INT      7030
GEOGSEMIMAJORAXISGEOKEY
        DOUBLE    6378137.0
GEOGSEMIMINORAXISGEOKEY
        DOUBLE    6356752.3
PROJECTEDCSTYPEGEOKEY
        INT      32611
PCSCITATIONGEOKEY
        STRING    'UTM / WGS84'
PROJECTIONGEOKEY
        INT      16011
PROJLINEARUNITSGEOKEY
        INT      9001
```

Also listgeo doesn't seem to exist at <https://www.remotesensing.org/geotiff/listgeo.html> any more.

Any help would be much appreciated

Thanks

Subject: Re: GeoTIFF help - conversion to lat/lon
Posted by [gombgg](#) on Mon, 26 Jun 2017 22:55:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

You probably found your answer by now, but your data appears to be using the UTM coordinate system, which is different than Lat/Lon. You'll need to convert your UTM coordinates to Lat/Lon first if you need to use that coordinate system.

Subject: Re: GeoTIFF help - conversion to lat/lon
Posted by [rjp23](#) on Sun, 02 Jul 2017 13:28:47 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Monday, June 26, 2017 at 11:55:38 PM UTC+1, gom...@gmail.com wrote:
> You probably found your answer by now, but your data appears to be using the UTM coordinate system, which is different than Lat/Lon. You'll need to convert your UTM coordinates to Lat/Lon first if you need to use that coordinate system.

Thanks! I'm still struggling to get this right so if you could point me in the right direction that'd be great.

Subject: Re: GeoTIFF help - conversion to lat/lon

Posted by [gombgg](#) on Tue, 11 Jul 2017 17:58:39 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Sunday, July 2, 2017 at 7:28:50 AM UTC-6, [rj...@le.ac.uk](#) wrote:

> On Monday, June 26, 2017 at 11:55:38 PM UTC+1, [gom...@gmail.com](#) wrote:

>> You probably found your answer by now, but your data appears to be using the UTM coordinate system, which is different than Lat/Lon. You'll need to convert your UTM coordinates to Lat/Lon first if you need to use that coordinate system.

>

> Thanks! I'm still struggling to get this right so if you could point me in the right direction that'd be great.

Something like this should come up on a search:

http://www.idlcoyote.com/map_tips/convertutm.php
