
Subject: Re: Question about projection for Google Earth

Posted by [Fabzi](#) on Mon, 19 Aug 2013 07:27:35 GMT

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On 08/19/2013 07:04 AM, timothyja123@gmail.com wrote:

> "The problem is that my lon/lat values contain a different number of values and

>Map_Proj_Forward() is complaining about this. Why do they need to be the same?

>My overlay is a rectangular shape rather than a square why can this not be handled?"

I don't really understand what you mean with "rather than a square" but Map_Proj_Forward() converts point coordinates into other points coordinates. As far as I know, points always have (at least) two coordinates so if you want to transform N points you should have N lats, and N lons. The real question is: why do you have a different number of lat and lon values?

The most typical case would be that your data is in equirectangular projection. For example:

```
IDL> nx = 360
```

```
IDL> ny = 180
```

```
IDL> lon = FINDGEN(nx) - 179.5
```

```
IDL> lat = FINDGEN(ny) - 89.5
```

if you want to pass them to map_proj you need "rectangles" as you say:

```
IDL> lon = lon # (LONARR(ny) + 1)
```

```
IDL> lat = lat ## (LONARR(nx) + 1)
```

```
IDL> help, lon, lat
```

```
LON      FLOAT    = Array[360, 180]
```

```
LAT      FLOAT    = Array[360, 180]
```

not sure if that helps but I am quite sure that Map_Proj_Forward() is not going to accept different vectors of lat/lon in the close future.

Cheers
