
Subject: Re: Maps - ellipsoids in map_set ('scale on the central meridian')

Posted by [Andy Sayer](#) on Fri, 17 Jan 2014 14:34:43 GMT

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The mystery thickens. The GSHHS shoreline database overlays the IDL one almost exactly for my image, so that's not it. I still can't get changing ellipsoids to make a noticeable difference so I am either doing it wrong or it is a sub-pixel shift. I used Google Earth to cross-reference the apparent position of features in the images and IDL's coastlines, and find that the 'true' positions (according to Google Earth are somewhere in between: there is roughly a 0.01 degree difference.

So I wonder if perhaps this image is misregistered, AND the shoreline databases are a little off. Perhaps when I am having problems on scales of 0.01 degrees I am expecting too much but having not worked with this resolution of data near coasts before I don't know if this is considered an 'acceptable' level of error or not.

Andy

On Thursday, January 16, 2014 5:14:10 PM UTC-5, AMS wrote:

> Actually I was adding the continental outlines after mapping with map_continents (and using /hires and /coast) rather than during map_set.

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> I experimented a bit with different ellipsoids (guessing 1 and 0.9996 for this mysterious third parameter) but it didn't seem to make a visible difference. So either I am doing it wrong (possible), or the difference between Clarke and WGS 84 ellipsoids is smaller than one data pixel (~100 m).

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> I'm planning to try the GSHHS stuff in the morning... we will see! But I would really not expect that would make such a difference (~1-2 km mismatch). Then again as the IDL maps don't recognise some countries which have existed for over a decade now, perhaps I should not be surprised. ;)

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> Andy

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> On Thursday, January 16, 2014 4:09:19 PM UTC-5, David Fanning wrote:

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>> AMS writes:

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>>> I suspected you might say that, David!
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>> Well, aside from MAP_SET just being generally terrible for doing
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>> professional map projection stuff, are you sure you are using the HI-RES
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>> continental outlines? Is this the kind of thing that can be improved
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>> with the GSHHS data?
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>> Cheers,
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>> David
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>> --
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>
>> David Fanning, Ph.D.
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>> Fanning Software Consulting, Inc.
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>> Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
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>
>> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
