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Subject: UTM Mapping support

Posted by [Arno F. Granados](#) on Mon, 19 Aug 1996 07:00:00 GMT

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I have a need for inputting UTM based data sets into IDL's mapping utilities. The problem is that IDL does not directly support UTM in it's map utilites. Does anyone have any routines for converting from UTM to Lat/Lon and vica versa?

Arno Granados  
Positive Systems Inc.  
Leaders in Digital Aerial Photography  
[granados@possys.com](mailto:granados@possys.com)

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Subject: Re: UTM map

Posted by [btt](#) on Wed, 28 Jul 2004 14:41:17 GMT

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Sverre Solberg wrote:

> Is there any possibility to draw a rectangular grid (with typically  
> 30x40 grid cells in XxY direction) on a standard UTM map in idl? What  
> I'm looking for is a standard plot presenting numerical model results  
> with the grid cells coloured according to the values. The map itself  
> is easy enough to make but when overplotting squares with fixed  
> distance (in meters) the grid lines get "zig-zaged" when converted to  
> lat/lon. Do I e.g. have to split the grid lines into an extremely dens  
> row of UTM coordinates and then convert to lat/lon? A bit awkward. As  
> far as I know, idl hasn't any functionality for UTM map coordinates,  
> or am I wrong?  
>

Hi,

Starting with IDL 5.6, the handy MAP\_PROJ\_\*\*\*\* routines have made life a lot easier to deal with map coordinate conversions. These should help you with the forward and backward coordinate transformations. I'm not sure if this will help answer your question... which is ... well, what is your question again?

Someday I'm gonna write a guide to mapping in IDL and throw in a nice GUI interface to the MAP\_PROJ\_INIT function. Just as soon as I figure it all out.

Considering that I have frequently fussed with mapping in IDL for a long time and still have to start from scratch each time, it could be a while.

Ben

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Subject: Re: UTM map

Posted by [sso](#) on Fri, 30 Jul 2004 08:16:30 GMT

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Ben Tupper <[btupper@bigelow.org](mailto:btupper@bigelow.org)> wrote in message  
news:<2mps37Fq1sctU1@uni-berlin.de>...

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> Ben

Thanks. We are still using the 5.5 version so upgrading will be good then. The problem which is now partly solved, was the following: I have a rectangular UTM grid with a grid spacing of 5km in x- and y-direction. I use your `utm_to_ll` routine to convert (each grid cell) to geo. coordinates. However, when plotting this on top of the map produced by the `map_set,/trans` routine the grid looks like it's handdrawn with "bumpy" grid lines. I thought this was due to the UTM->geo conversion but discovered that it was only seen on the screen or if printed to a bitmap file. When making e.g. a cgm (or PS) file the lines are perfectly straight. So this helps a lot, but still I'm confused why the lines are not straight on the screen, and since this is part of widget system with a clickable map, it's still a slight problem.

Sverre

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