Subject: Re: Display of topo map in MAP routines. Posted by David Fanning on Tue, 22 Sep 2009 19:22:53 GMT View Forum Message <> Reply to Message

## Paul van Delst writes:

- > Can someone outline (real quick) the steps needed to display a topo map in the background
- > of a map projection? Other point data will be overplotted over this background.

Do you really mean "topo map"? If you do, I'm not sure there \*is\* a quick way to do this. Maybe if you could get ahold of a digital topo map in GeoTIFF format you might be OK. But even the smallest topo map is going to be HUGE and difficult to work with. I have a topo map of Canyonlands National Park in front of me on the wall. It's about 3 by 4 feet. I hate to think what size it would be in digital format. :-(

> Does a DEM file come with IDL, or do I need to visit the USGS?

IDL does not come with a DEM file. Is this what you mean by a "topo map"?

Maybe you could clarify what you are trying to do, including some explanation of the tools you plan to use. I have a feeling you are asking about building a 18,000 sq ft dream home, but have the plans for a dog house in front of you. :-)

Cheers,

David

--

David Fanning, Ph.D.

Coyote's Guide to IDL Programming (www.dfanning.com) Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Display of topo map in MAP routines.

Posted by Paul Van Delst[1] on Tue, 22 Sep 2009 20:39:52 GMT

View Forum Message <> Reply to Message

## David Fanning wrote:

> Paul van Delst writes:

>

>> Can someone outline (real quick) the steps needed to display a topo map in the background

>> of a map projection? Other point data will be overplotted over this background.

>

- > Do you really mean "topo map"? If you do, I'm not sure
- > there \*is\* a quick way to do this. Maybe if you could
- > get ahold of a digital topo map in GeoTIFF format you
- > might be OK. But even the smallest topo map is going to
- > be HUGE and difficult to work with. I have a topo map of
- > Canyonlands National Park in front of me on the wall.
- > It's about 3 by 4 feet. I hate to think what size it would
- > be in digital format. :-(

>

>> Does a DEM file come with IDL, or do I need to visit the USGS?

>

- > IDL does not come with a DEM file. Is this what you
- > mean by a "topo map"?

>

- > Maybe you could clarify what you are trying to do,
- > including some explanation of the tools you plan to
- > use. I have a feeling you are asking about building
- > a 18,000 sq ft dream home, but have the plans for a
- > dog house in front of you. :-)

If I grok the analogy correctly, I think I mean the opposite. I'll be quite happy with the doghouse version. :o)

But I did mean a digital elevation map (i.e. lat, lon, height). A colleague supplied the GTOPO30 DEM data from the USGS and I bumbled my way through to actually displaying the elevation data on a map (yay!).

I was trying to avoid the hassle of writing code to read the DEM file - but it ended up being relatively simple. Once I have x, y, and z data in IDL I can figure out how to display stuff by browsing your site and my books -- it was getting said data from disk file to IDL variable that I was being lazy about. I thought there was some well know-about file with an object reader in IDL (at least, to the DEM/IDL cognoscenti) but I guess not.

Sorry for the newsgroup noise...

cheers.

paulv

Subject: Re: Display of topo map in MAP routines.
Posted by Kenneth P. Bowman on Tue, 22 Sep 2009 20:41:10 GMT
View Forum Message <> Reply to Message

In article <h9b1dm\$kse\$1@news.woc.noaa.gov>, Paul van Delst <paul.vandelst@noaa.gov> wrote:

> Hello.

>

> I'm sure this question has come up before (I did a quick search of David Fanning's tips

> but didn't immediately see anything). Apologies in advance for being a bit lazy....

>

> Can someone outline (real quick) the steps needed to display a topo map in the background

> of a map projection? Other point data will be overplotted over this background.

>

> Does a DEM file come with IDL, or do I need to visit the USGS?

>

> Thanks for any info/help.

>

> cheers.

>

> paulv

If you go to my downloads page

http://idl.tamu.edu/Downloads.html

and download my library

http://csrp.tamu.edu/downloads/idl/bowman\_lib.zip

it includes some routines to read your choice of two different global topography databases. (They are included in the download.)

These data are on 5-minute and 10-minute lat-lon grids, and may not have the resolution that you need.

There is also a land-ocean data base with associated access routines.

Plot the maps and then fire away with PLOTS.

Cheers, Ken Bowman

Subject: Re: Display of topo map in MAP routines.
Posted by Paul Van Delst[1] on Tue, 22 Sep 2009 20:56:50 GMT
View Forum Message <> Reply to Message

Kenneth P. Bowman wrote:

- > In article <h9b1dm\$kse\$1@news.woc.noaa.gov>,
- > Paul van Delst <paul.vandelst@noaa.gov> wrote:

>

>> Hello,

>>

- >> I'm sure this question has come up before (I did a quick search of David Fanning's tips
- >> but didn't immediately see anything). Apologies in advance for being a bit lazy....

```
>>
>> Can someone outline (real quick) the steps needed to display a topo map in the background
>> of a map projection? Other point data will be overplotted over this background.
>> Does a DEM file come with IDL, or do I need to visit the USGS?
>>
>> Thanks for any info/help.
>>
>> cheers,
>>
>> paulv
> If you go to my downloads page
>
    http://idl.tamu.edu/Downloads.html
>
>
  and download my library
>
>
    http://csrp.tamu.edu/downloads/idl/bowman_lib.zip
>
>
  it includes some routines to read your choice of two different
  global topography databases. (They are included in the download.)
>
> These data are on 5-minute and 10-minute lat-lon grids, and may
> not have the resolution that you need.
>
 There is also a land-ocean data base with associated access routines.
> Plot the maps and then fire away with PLOTS.
Excellent, thanks!
cheers,
paulv
```