
Subject: Re: Reding data into IDL

Posted by [davidf](#) on Mon, 21 Apr 1997 07:00:00 GMT

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Richard Hall writes:

- > I have a set of co-ordinates (lat,long) containing ca. 800 points.
- > I wish to plot these points on a map. My problem is,
- > how do I convert the ascii file into a format understood by IDL?

The nice thing about IDL is that no conversion is necessary. This data is ready to go! Suppose you have 2 columns by 800 rows of data. Read the ASCII data like this:

```
data = FltArr(2, 800)
OPENR, lun, filename, /Get_Lun
READF, lun, data
FREE_LUN, lun
lat = REFORM(data(0,*))
lon = REFORM(data(1,*))
```

If you want to plot these points on a map, you can do it directly with a routine like PLOTS. If the points are in lat/lon coordinates nothing needs to be done except to establish a map projection. For example,

```
Map_Set, /Orthographic, /Isotropic
PLOTS, lon, lat, PSYM=4
```

If you wish to plot these points on a map as an image or contour plot, then you will need to grid the points into a 2D array using the TRIANGULATE and TRIGRID routines. There is an excellent article on how to do this in the Map Projection Tips section of my web page.

- > Also, the map data supplied with IDL is a little too coarse for my requirements.
- > How do I go about obtaining a finer set of co-ordinates, and loading them into
- > IDL.

Go back to your installation CD ROM and download the high resolution CIA database.

Cheers!

David

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