Subject: IDL mapping capabilities
Posted by rawlins on Wed, 04 Sep 1996 07:00:00 GMT

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I am currently assisting our geography department system administrator
in a search for a replacement for our current mapping routines
(DI3000). We do a great deal of mapping here at the U of Delaware, and
I need to know about IDL's capabilities for mapping/graphics.
  Below is a simple example that illustrates our most fundamental
needs.

  I would appreciate all relavant information about IDL !!

  Let's say I have a data file with three variables; the first column is a
polygon #, the second is latitude, the third longitude. Like this:

```
1  43.5  172.4
1  43.2  171.8
1  43.0  171.2
1  42.8  171.0
1  42.4  170.8
2  42.6  179.7
2  42.3  178.5
2  41.5  178.3
3  40.5  176.6
3  41.5  177.8
.    .     .
.    .     .
.    .     .    and so on
```


  It is essential that for us, IDL needs to be able to connect the dots,
so to speak. Where the polygon numbers are the same (the first 4 rows),
we would want to use commands to connect the dots(lat and lon). When the
polygon number changes (5th line), the "pen" lifts up, and moves to those
lat and lon. Then we draw another polygon based on the lats and lons in
rows 5,6,7. And so on .... And when finished, we have N number of
polygons (land areas) plotted on our map.

  Of course, the numbers may not be lats or lons, they could be any real
numbers, like the above lats and lons AFTER they have been projected into
another coordinate space. Much of my work is in a polar projection, where
I run latitude and longitude coordinates through a projection routine and
they become real numbers from -1 < x < 1.

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If you lose your will and give up, you neither win nor live.
   That's just the way it is.
                              -- The outlaw Josie Wales

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