
Subject: mapping/zooming

Posted by [delp](#) on Thu, 10 Aug 1995 07:00:00 GMT

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I'm trying to display a map of the north polar region.

First, I'd like to have the window initialized with the continents between 55-90 degrees lat displayed. I've tried

```
map_set, 90, /grid, /continent, /azimuthal, limit=[55,-180,90,180]
```

but I get floating point errors. Any ideas?

Second, I'd like to draw a bounding box and have it's contents zoomed to fill the display. I've written the code to draw the bounding box, I'm assuming that all I need to do is recreate my map projection with the new center and dimension parameters. Is this correct?

Third, does IDL provide routines to convert screen coordinates to lat/lon in a given projection (and vice-versa)?

Thanks alot,

Steve

Subject: Re: mapping/zooming

Posted by [svenw](#) on Fri, 11 Aug 1995 07:00:00 GMT

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lena@jaameri.gsfc.nasa.gov (Jelena Marshak) writes:

>>

> I have produced a number of polar region data visualization plots and

> I don't see anything wrong with using

>

> map_set,90,/grid,/continent,/azimuthal,limit=[55,-180,90,180]

>

> It works on my computer.

>

> -Lena Marshak

Yes, you are right. I was wrong, but I have managed to get errors with certain choices of parameters.

--

Sven Wallman <http://www.update.uu.se/~svempa/>

"Of what importance is mere money -
when there are worlds to be conquered -
people to be enslaved?" -- Doctor Doom

Subject: Re: mapping/zooming
Posted by [afl](#) on Fri, 11 Aug 1995 07:00:00 GMT
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In article <DELP.95Aug10103516@vexcel.vexcel.com>, delp@vexcel.com (Steve Delp) writes:

|>
|> I'm trying to display a map of the north polar region.
|>
|> First, I'd like to have the window initialized with the continents between
|> 55-90
|> degrees lat displayed. I've tried
|>
|> map_set, 90, /grid, /continent, /azimuthal, limit=[55,-180,90,180]

This worked fine under IDL 4.0
Also, you may want to add the /iso keyword.

|> but I get floating point errors. Any ideas?
|>
|> Second, I'd like to draw a bounding box and have it's contents zoomed to fill
|> the display.
|> I've written the code to draw the bounding box, I'm assuming that all I need
|> to do is
|> recreate my map projection with the new center and dimension parameters. Is
|> this correct?

Sorry, but I don't understand what you are trying to do.

|> Third, does IDL provide routines to convert screen coordinates to lat/lon in
|> a given
|> projection (and vice-versa)?
|>

Look at the documentation for cursor.

Subject: Re: mapping/zooming
Posted by [svenw](#) on Fri, 11 Aug 1995 07:00:00 GMT
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delp@vexcel.com (Steve Delp) writes:

> I'm trying to display a map of the north polar region.
> First, I'd like to have the window initialized with the continents between 55-90
> degrees lat displayed. I've tried
> map_set, 90, /grid, /continent, /azimuthal, limit=[55,-180,90,180]
> but I get floating point errors. Any ideas?

I'm no expert on projections, but you can't have the north pole as a center.
Try using 89 instead of 90, but the map will probably look somewhat distorted.

> Second, I'd like to draw a bounding box and have it's contents zoomed to fill the display.
> I've written the code to draw the bounding box, I'm assuming that all I need to do is
> recreate my map projection with the new center and dimension parameters. Is this correct?

I think so..

> Third, does IDL provide routines to convert screen coordinates to lat/lon in a given
> projection (and vice-versa)?

Yes, convert_coord does that. Just make sure where your point of origin is.
xv has its origin in the upper-left corner.

--

Sven Wallman <http://www.update.uu.se/~svempa/>

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