
Subject: Re: Extract Data from Point on Plot
Posted by [mrjeJones](#) on Thu, 05 Feb 2009 21:19:21 GMT
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On Jan 29, 5:42 pm, David Fanning <n...@dfanning.com> wrote:

> mrjejo...@gmail.com writes:

>> Just for more clarification, I am reading this information from a
>> netCDF file into IDL and doing a "plots" to draw it over a map_set. I
>> just want to give the coordinate in the PS (x,y coords) and get the
>> lat, long, and albedo for that pixel.

>
> This is pretty much what I do for a living these days,
> although I have pretty much completely given up on
> MAP_SET for much of anything. The secret is being
> able to set up a coordinate system for a rectangular
> area of the graphics display. This could be an image,
> a line plot, a contour plot, etc. For a map coordinate
> system, I use the MAPCOORD object in the Catalyst
> Library. Normally, I use this in conjunction with
> a ScaleImage object, which has a method (via the
> CatImage object) to convert a location in the local (map)
> coordinate system into a location in a pixel coordinate
> system, so it can obtain the value of that pixel.

>
> I don't expect you to dive into the Catalyst Library,
> but you can see the guts of this system at work in
> TVINFO, which works with TVIMAGE to allow you to click
> on any displayed image and get the value of the image
> at that location. (More or less, of course, since this
> works no matter what resolution you are displaying your
> image in.)

>
> I should be charging you thousands of dollars for this
> information, but I'll give it away to you for free, since
> Matt Savoie spilled the beans to me and didn't charge me.
> The real secret is using SCALE_VECTOR together with
> VALUE_LOCATE to locate the correct pixel value. It is so
> slick it is embarrassing to think it only took Matt and me
> a combined 35 years to think of it. :-(

>
> Here are some articles to read. They all use this idea:

>
> <http://www.dfanning.com/catalyst/imgwin.html>
> <http://www.dfanning.com/catalyst/maPONimage.html>
> http://www.dfanning.com/graphics_tips/tvinfo.html

>
> Cheers,
>

- > David
- > --
- > David Fanning, Ph.D.
- > Coyote's Guide to IDL Programming (www.dfanning.com)
- > Sepore ma de ni thui. ("Perhaps thou speakest truth.")

I appreciate your help. I've read and use gobs of information from your website and turned the Coyote library documentation into a PDF (very handy). I'm going to read everything you said to but meanwhile I had found this procedure "MAP_PROJ_INVERSE". What you described is exactly what I want so I may ditch the map_proj.

Thanks for all the assistance you give the IDL community.
