Subject: Re: Automatically Register GeoTIFF Images Posted by TonyL on Mon, 31 Aug 2009 12:12:20 GMT

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On Aug 31, 3:38 pm, David Fanning <n...@dfanning.com> wrote:
> Folks,
>
 I gave an IDL seminar last week, and in the discussion afterward
> I had a wonderful idea about how I could write a program that
> would automatically open GeoTIFF images and display them
  in a georegistered map coordinate system.
 The idea was so compelling I basically gave up the last
 weekend of the summer to write the damn thing. (I really
 have got to get a life!)
>
 Anyway, that's what I did. I don't claim the program.
> which translates a GeoTIFF structure obtained from
> Query TIFF or Read TIFF into a map coordinate object,
> works with every GeoTIFF image in the world. It may not
> even work with most of them. But it does work with all
> of the ones I had nearby while I was writing the program.
> That is to say, it appears to work with the GeoTIFF images
 I run into in my own work. The program is named GeoCoord.
>
>
   http://www.dfanning.com/programs/gocoord.pro
>
>
  If it doesn't work with yours, I'd be happy to have
  a look at it and see why not. I'd like this program to
  work with as many flavors of GeoTIFF files as possible.
  To put the program to use, I've modified both SelectImage
 and ImgWin so that when they open GeoTiff image files now,
 they can georegister the image when necessary. This is
> incredibly useful to me, and I have ideas for how I can
> incorporate the same functionality into some netCDF files
 I run into at work.
>
> You can read about the programs, and how I use them,
> in this article:
   http://www.dfanning.com/autogeoreg.html
>
> Naturally, a big idea like this exposes a hell of a lot
> of poor thinking and planning, not to mention bugs, in
  code that was previously thought to be perfect. :-(
> I think in the end, about eight programs got rearranged some.
```

- > Most of these were Catalyst Library routines (since the map
- > coordinate object lives here), and the one Coyote Library
- > routine, SelectImage, now has a Catalyst Library dependency,
- > so it more properly belongs in the Catalyst Library pile.
- > I haven't moved it yet, but I probably will.

>

- > Or, I might just move the Catalyst Library under the auspices
- > of the Coyote Library. Nearly everything I write lately uses
- > it, so why am I fighting so hard to keep it separate?

>

- > But, there is a list at the end of the article described above
- > if you want to get yourself up to speed with new programs, etc.
- > Basically, if you haven't updated your Coyote and Catalyst Libraries
- > in a while, now would be a good time to do it. :-)

>

>

> http://www.dfanning.com/catalyst/howtoinstall.html

> Cheers,

>

> David

>

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

The URL for David's georeg web page link is:

http://www.dfanning.com/map_tips/autogeoreg.html

Tony

Subject: Re: Automatically Register GeoTIFF Images
Posted by David Fanning on Mon, 31 Aug 2009 20:57:19 GMT

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TonyL writes:

> The URL for David's georeg web page link is:

http://www.dfanning.com/map_tips/autogeoreg.html

Yikes, the problem with working close to midnight. :-(

Of course, the very first GeoTIFF file I faced at work balked at being led through my GeoCoord translator. I

now know of four synonyms for "longitude" and three for "latitude". There are probably more.

To make this less trouble to maintain, I've reworked the code a bit. It now looks prettier (and probably works better because of it) than it did before. I also discovered another bug or two. You can get the latest here:

.../programs/catalyst/source/coordinates/geocoord.pro

where "..." means:

http://www.dfanning.com/

Cheers,

David

--

David Fanning, Ph.D.

Coyote's Guide to IDL Programming (www.dfanning.com)

Sepore ma de ni thui. ("Perhaps thou speakest truth.")