
Subject: Re: Bug in GSHHS Data Files?

Posted by [TonyL](#) on Mon, 29 Dec 2008 02:11:30 GMT

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On Dec 25, 1:17 pm, David Fanning <n...@dfanning.com> wrote:

> Folks,
>
> I am a big fan of the GSHHS Coastline data set for drawing
> coastlines on map projections in IDL:
>
> http://www.dfanning.com/map_tips/gshhs.html
>
> But the other day I downloaded the latest version of the
> software (gshhs_1.10.zip) from this page:
>
> <ftp://ftp.soest.hawaii.edu/pwessel/gshhs/>
>
> When I used the intermediate resolution data file (gshhs_l.b), as
> I did in the article above, my mapping program failed.
> You can find the mapping program here:
>
> http://www.dfanning.com/programs/map_gshhs_shoreline.pro
>
> As it happens, the header structure has changed for newer
> versions of the GSHHS data. The old header was 40 bytes
> in size; the new header is 32 bytes in size, with some of
> the previous information packed into a single long integer.
> So, I modified the header structure definition in my code to
> conform to the new 32 byte header. But, unfortunately, not all
> of my problems went away. :-(
>
> I eventually discovered, after a GREAT deal of effort, that
> while all the various resolutions of data in the zip file all
> appear to use the new structure, the structure is still packed
> into 40 bytes for *some* of the files, and into 32 bytes for
> others. As you can imagine, this causes great difficulties
> reading the data.
>
> I've alerted the author, but have yet to hear from him.
> (Huh!? Am I the only person working on Christmas Eve!)
>
> So, anyway, I have updated the MAP_GHSSS_SHORELINE program
> to use the new structure definition, but at the moment I
> can only use the program to read the gshhs_h.b file. I have
> to add 8 bytes of junk to the header to successfully
> read the gshhs_l.b file.
>
> It's a big of a dog's dish at the moment (to use one of

> my favorite English expression). I hope to have it sorted
> out soon.
>
> OK, I have to go wrap packages. Happy Holidays!
>
> 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.")

Thanks for checking that out, David. I use the GSHHS data a lot but tend to not update the data very often. Hopefully the data files will revert to their earlier formats in terms of header structure so that we don;t have to change any programs that use pre-existing readers.

Tony
