
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_1.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_1.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
