
Subject: Bug in GSHHS Data Files?

Posted by [David Fanning](#) on Thu, 25 Dec 2008 02:17:27 GMT

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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

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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