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Subject: Re: map\_set coastline data

Posted by [Liam E. Gumley](#) on Wed, 08 Jan 2003 22:09:22 GMT

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"Mark Hadfield" <m.hadfield@niwa.co.nz> wrote in message  
news:avi3pn\$mgf\$2@newsreader.mailgate.org...  
> "paul wisehart" <wisehart@runbox.com> wrote in message  
> news:slrnb1omah.3qf.wisehart@stingray.mcst.ssai.biz...  
>> How do I get at the data that map\_set uses  
>> to plot coastline/continents?  
>>  
>> I can find the actual files on my machine, I  
>> just don't know how to open them.  
>  
> I have a couple of routines to read these files and can send them to you  
if  
> you want.  
>  
> But, as Rick comments, there are better sources of coastline data. These  
> days I use GSHHS:  
>  
> <http://www.ngdc.noaa.gov/mgg/shorelines/gshhs.html>

I've written a short procedure to plot the GSHHS binary data files. It's  
available at

<ftp://origin.ssec.wisc.edu/pub/gumley/IDL/gshhs/>

The files required are plot\_gshhs.pro and little\_endian.pro (the GSHSS files  
are stored in big-endian order). Here's a few examples:

```
IDL> window, /free, xs=800, ys=600
IDL> map_set
IDL> gshhs_plot, 'gshhs_l.b' ; Low resolution (5.0 km)
IDL> gshhs_plot, 'gshhs_l.b', /fill
IDL> map_set, 45, -90, scale=20e6
IDL> gshhs_plot, 'gshhs_i.b' ; Intermediate resolution (1.0 km)
IDL> gshhs_plot, 'gshhs_i.b', level=2
IDL> map_set, 25, -80, scale=4e6
IDL> gshhs_plot, 'gshhs_h.b' ; High resolution (0.2 km)
IDL> gshhs_plot, 'gshhs_h.b', level=3, /fill
```

The procedure could be made faster through by a smart indexing scheme: this  
version always reads the entire file. But it does seem to do a reasonable  
job, and it fixes some of the gross inaccuracies of the old CIA WDBII data  
use by map\_continents.pro.

Cheers,

