HW10 update

Some issues have arisen with HW10 due to differences between the setup on my Mac and those in the MACLAB. I have both GMT4 and GMT5 installed. I have to use the “official” method of calling GMT5 by using, for example, “gmt psxy”. If I call just “psxy” I get GMT4.

The machines in the MACLAB only have GMT5. Calling “gmt psxy” and “psxy” behave the same – it runs the GMT5 version of psxy (if you type any gmt program’s name in by itself {eg just “psxy” for example} it will dump the man page to the screen).

The codes I provided for the plate boundaries (plate\_bound\_map\_1.sh, etc.) are in **GMT4** and work in GMT4. There were some changes in the “switches” or options between GMT4 and GMT5. Look on the internet and compare the documentation for psxy in particular.

GMT4 required that you stated a character (default was “>”) that separated multiple segments of lines contained in a file (when to “lower” and “lift” the pen) when plotting lines with psxy. This way you could put all the subduction zones in one file, instead of one file for each zone. In GMT5 the program has gotten smart enough to figure it out itself (any line that does start with 2 numbers is a break, people usually put in the name of the feature for example, and you can put in multiple non numeric lines). The flag to specify the break (-M) has therefore been “deprecated” (deprecated is computer jargon - “**Deprecated means**, generally, that something is acknowledged but discouraged. In ***IT***, **deprecation means** that although something is available or allowed, it is not recommended or that, in the case where something must be used, to say it is **deprecated means** that its failings are recognized.”). In GMT5 however the -M is not deprecated (in which case it would still run as it is “discouraged” or not recommended), it reports an error and does not plot anything, “-M” is NOT ALLOWED. So you have to remove the “-M” flag and its associated value.

Next, the format of the -W option has changed. Read the man pages for the two versions of pxsy (you can still find the GMT4 man pages on the web – the authors of GMT only show the newest version, which is actually not 6, but there are many places that host their own copy of the documentation so you can still find it for older versions) or just the man page for GMT5 and figure out what is wrong with the code as written.

Since most of what you will find on the internet in GMT is going to be in versions other than 5, converting from 4 to 5 (or 6 back to 5) is a useful skill. Convert the parts of the code you are using from plate\_bound\_map\_1.sh, that is in GMT4, to GMT5 (hint, the only changes are in the psxy call).

I converted example\_22.sh to GMT5 from GMT6.

You will probably also encounter scale changes. These are fixed by the scale value in the -J call, or stating “c” for cm, or “I” or inches.