**Instructions for installing gnuplot on Mac OS X via Macports**

***Note: (Thomas Davies , Nov 2016).***

*These are legacy instructions written in 2014 for installing gnuplot via macports. I originally installed via Fink a few years previously (which was even more complicated). However, I believe there are now contributed MacOSX executables (*[*http://ricardo.ecn.wfu.edu/pub/gnuplot/*](http://ricardo.ecn.wfu.edu/pub/gnuplot/)*) - which should be the easiest route, although I’ve never tried this myself. These instructions below haven’t been updated since 2014.*

Go to macports.org

It recommends installing Xcode first, so let’s do that. (I haven’t tested if you can get away without it or not, but it shouldn’t do any harm to install it anyway).

You can download Xcode Developer tools for free from the AppStore. It is free, although in my case asked me to verify billing info before downloading. It’s a big file (2.18GB) so will take a while to download (and I guess be careful if you happen to be on an internet connection that is not unlimited downloads. *[Additional Note Oct 2014: It seems you have to be on the most recent version of OS X to be able to download the developer tools, and I am very doubtful you can get away without it - that probably means updating to Mavericks at the moment – which is what we had to do for a couple of people in Cambridge]*

Should install itself all automatically.

2. macports now says about agreeing to a license, so open “Terminal” and type in their suggested line:

sudo xcodebuild –license

press return and it asks you to enter your mac password (i.e. the one to enter your user account when you start your mac). It doesn’t show you any of the letters you’ve typed etc, so just type in and then hit return

you have to hit space bar a lot to get through all the agreement, then type “agree” and you will be all done. I didn’t actually read the agreement, so I have no idea what you have just agreed to.

3. Now back to the macports webpage, select the version for the right version of OSX that you are running. I’m doing this on Mavericks.

4. Go through the normal style installer pages, to get macports installed. In my case it installed in just a couple of minutes.

5. Open a new terminal window (under Shell/new window). Type “port version”, and it should specify the version (my case, 2.3.1). this just tests it has installed ok.

6. As a first step, I ran an update to check it would have the most recent version of everything. Type: “sudo port selfupdate” and enter your password to get it running.

Fyi. Am using: <https://guide.macports.org/#installing.macports>

7. To install gnuplot type: sudo port install gnuplot

and it will start by looking for all the dependencies, and then slowly installs them all. In my case, at this stage I got a warning saying that I don’t have xcode command line tools installed, which may lead things to fail. If so, I need to open xcode, go to preferences, downloads section, and click install next to “Command Line Tools” (info from the macports guide – google search macports xcode command line tools). However, it then proceeded to install everything fine, and so I never went on to do this. It would be a good first step for troubleshooting if it doesn’t work.

Note Oct 2014: With one installation of this I did in Sep 2014, at this point the install failed, after a minute of two of installing packages successfully, it gave the following error reported in terminal, and stopped:

Error: org.macports.activate for port expat returned: Image error: /opt/local/bin/xmlwf already exists and does not belong to a registered port. Unable to activate port expat. Use 'port -f activate expat' to force the activation.

Error: Failed to install expat

Please see the log file for port expat for details:

/opt/local/var/macports/logs/\_opt\_local\_var\_macports\_sources\_rsync.macports.org\_release\_tarballs\_ports\_textproc\_expat/expat/main.log

Error: The following dependencies were not installed: expat fontconfig freetype bzip2 libpng zlib libiconv gd2 jpeg libvpx tiff xz gettext ncurses xpm xorg-libXext xorg-libX11 xorg-kbproto xorg-libXau xorg-xproto xorg-libXdmcp xorg-libxcb python27 db46 db\_select libedit openssl python\_select sqlite3 xorg-libpthread-stubs xorg-xcb-proto libxml2 xorg-xextproto xorg-libXt xorg-libsm xorg-libice libcerf lua readline pango Xft2 xrender xorg-renderproto cairo glib2 libffi perl5 perl5.16 gdbm libpixman xorg-xcb-util gobject-introspection libtool py27-mako py27-beaker py27-setuptools py27-markupsafe harfbuzz graphite2 pkgconfig wxWidgets-3.0 wxWidgets\_select

To report a bug, follow the instructions in the guide:

http://guide.macports.org/#project.tickets

Error: Processing of port gnuplot failed

I have no real understanding of this, but we took the decision to just force the activation (as it says) – so we just typed: “port –f activate expat” (N.B. “expat” is just the name of the particular package that has hit an error, so replace “expat” with the name of whichever one has failed). You may have to type: “sudo port –f activate expat” (‘sudo’ is to become “super-user” – i.e. with admin privileges, and you may have to type your user password in for your mac). This seemed to work. You then try installing gnuplot again, and it will continue through its list of packages, we had problems with a handful of different ones, but just repeated the same process until it was successful with gnuplot. I have no idea really of whether this does anything important to your computer – but in our case it seemed to be fine!!

8. Okay, we should be set up, you don’t need to do anything with gnuplot at all, but the AsciiSection programme utilizes it, and therefore without it you get a lot of errors, and no cross-section images.

At this point you probably want to go to the instructions for installing AsciiSection, get that set up, and once you start running it, check that you are getting lots of image files of your sections. If not, then that is probably a problem with this gnuplot installation, and you might need to come back here (or try macports.org) to troubleshoot.