Building GMAT on Snow Leopard

Instructions for using wxWidgets 2.8.10;
Deprecate when the Snow Leopard build of wx is released

1. Download and unpack wxWidgets 2.8.10
2. Make a build folder inside of the wx folder:
   - cd <wxFolder>
   - mkdir shared
   - cd shared
3. (These instructions are a modified version of the instructions at wiki.wxwidgets.org/Development:_wxMac#Building_under_10.6_Snow_Leopard The change adds the OpenGL library to the build.)

   Build the wx configuration to use the Carbon libraries. This is the crucial step (each bullet is a single line here):
   - arch_flags="-arch i386"
   - ../configure CFLAGS="$arch_flags" CXXFLAGS="$arch_flags" CPPFLAGS="$arch_flags" LDFLAGS="$arch_flags" OBJCFLAGS="$arch_flags" OBJCXXFLAGS="$arch_flags" –with-opengl

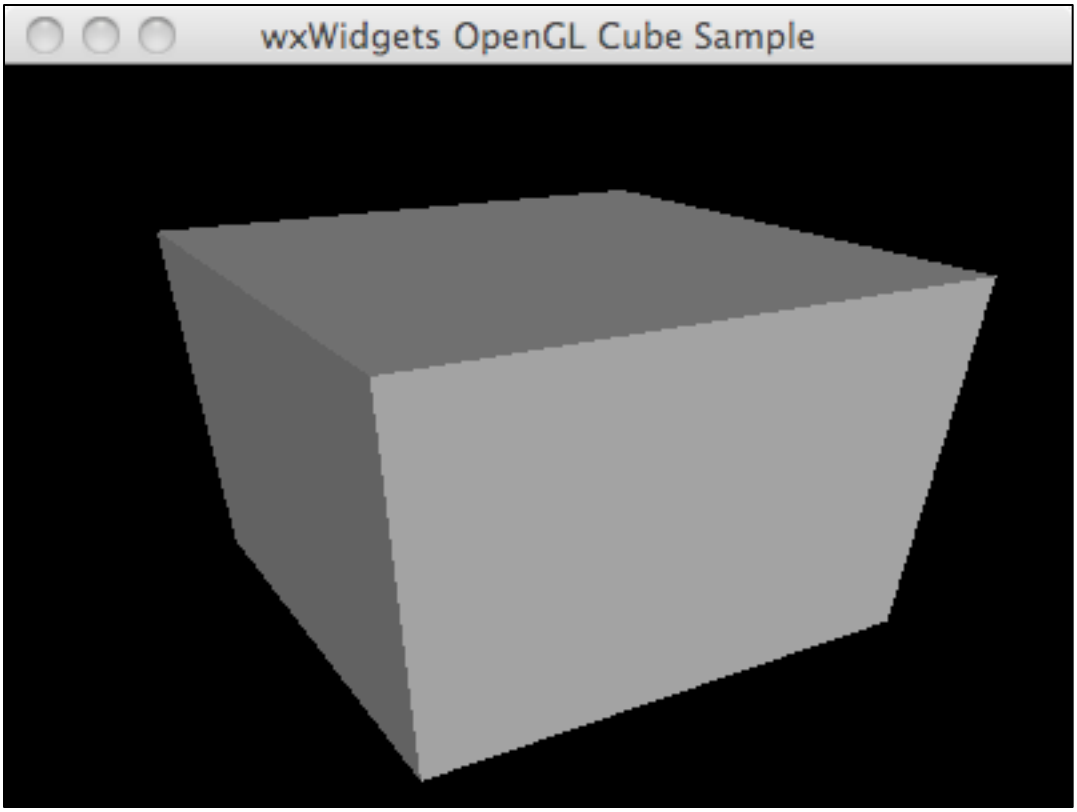
   Assuming you wave all needed components instlled – i.e. the compilers and linker – you'll get a message like this:

```
Configured wxWidgets 2.8.10 for `i686-apple-darwin10.2.0'

  Which GUI toolkit should wxWidgets use?                 mac
  Should wxWidgets be compiled into single library?       no
  Should wxWidgets be compiled in debug mode?             no
  Should wxWidgets be linked as a shared library?         yes
  Should wxWidgets be compiled in Unicode mode?           no
  What level of wxWidgets compatibility should be enabled?
                                      wxWidgets 2.4       no
                                      wxWidgets 2.6       yes
  Which libraries should wxWidgets use?
                                      jpeg                builtin
                                      png                 builtin
                                      regex               sys
                                      tiff                builtin
                                      zlib                sys
                                      odbc                no
                                      expat               sys
                                      libmspack           no
                                      sdl                 no
```

4. Build wx:
   - make
5. Install the wx libraries (if you have admin rights; if you don't have rights, you'll need to do some library management by hand for the testing):
   - sudo make install

6. Check the build by building one of the samples. I usually do the cube ample because it tests the OpenGL library along with general wx stuff:
    - cd samples/opengl/cube/
    - make
    - open ./cube to see this app running:



7. (From here, I'm giving Eclipse instructions; adapt as needed for your build environment) Open Eclipse, and download or update the GMAT source files.
8. Copy the Snow Leopard build files BuildEnv.mk and MakeGmat.eclipse from the build/mac_snowleopard folder into the src folder.
9. Clean and build GMAT.
10. Plan spacecraft missions. You're done!