GNU EMACS AD Model Builder GUI Guide

Description of AD Model Builder menu
This menu helps make the emacs text editor useful as an interface for AD Model Builder.

Installation
/emacs/emacs-21.3/lisp
Copy admodel.el to this directory.
Make a file called site-start.el
Add the following text to the site-start.el file and save it.

```
;;load ad model tool bar
(require 'admodel)
(setq auto-mode-alist
  (append '(("\\.tpl\\'" . admodel-mode))
  auto-mode-alist))
```

Description of Menu Items
The menu currently contains 15 items. In order, these are:

TPL2CPP – converts an AD Model Builder .tpl file to a .cpp file
Compile – Compiles the .cpp file using the "safe" ADMB libraries
Link – Links the executable using the "safe" ADMB libraries
Makeadms – executes TPL2CPP, Compile, and Link using the safe ADMB libraries
Makeadm – executes TPL2CPP, Compile, and Link using the optimized ADMB libraries
TPL2REM – converts an AD Model Builder RE .tpl file to a .cpp file
Compilere – Compiles the .cpp file using the "safe" ADMB-RE libraries
Linkre – Links the executable using the "safe" ADMB-RE libraries
Makeadms – executes TPL2REM, Compilere, and Linkre using the safe ADMB-RE
        libraries
Makeadm – executes TPL2REM, Compilere, and Linkre using the optimized ADMB-RE
        libraries
Run – runs the current model
Run -est – runs the current model with the "-est" switch
Run -lprof – runs the current model with the "-lprof" switch
Run -mcmc – runs the current model with the "-mcmc" switch
Run… - Allows the user to enter the desired switches

Updating ADModel menu for different compilers/versions
In order to change compilers, you just need to make sure the menu buttons call the proper commands. You just need to change the text in the highlighted region below (illustration of a single menu item) to match the proper command in the admodel/bin directory. I think that each compiler version uses a different set of commands, and sometimes the names of the batch files (what the compile and link commands refer to) are simply changed between versions.

```
(defun admodel-compile ()
```

```
"Run myegcss on current buffer."
(interactive)
(save-buffer)
(let ((adfile (substring buffer-file-name 0 -4))
  (buffer (get-buffer-create "*MYEGCSS Messages*")))
  (set-buffer buffer)
  (erase-buffer)
  (start-process "compilecpp" buffer "myccs" adfile)
  (display-buffer buffer)))
```

Using the ADModel menu in Emacs
When you open a file with a ".tpl" extension, the ADModel menu should appear. If you have several windows (buffers in emacs) open, the active cursor has to be in a window with the .tpl file for the menu to appear.

If you open tpl files from different directories, only the tpl file from the first directory you opened will work correctly. To remedy this, open a new emacs session (from the start menu) and open the tpl file in that one.

How to add the admodel menu to the Windows emacs menu. (if you are getting emacs from a different source than the zip file referred in this document.

Navigate to C:/emacs/emacs-21.3/lisp
Copy admodel.el to this directory. If you did not install ADMB in C:\admodel, then the menu will not work properly. Either reinstall ADMB to be in C:\admodel, or edit all of the commands in admodel.el so they refer to the proper directory. If you use a different directory, you will also need to write the correct path statement in the autoexec.bat.

Make a file called site-start.el
Add the following text to the site-start.el file and save it.
;;load ad model tool bar for all ".tpl" files
(require 'admodel)
(setq auto-mode-alist
  (append '(("\\.tpl\\'" . admodel-mode))
  auto-mode-alist))