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Lecture Summary for Friday, 13 February 2009

- Two types of GEMPAK programs were introduced:
  - GDPLOT is a program that draws contours through scalar grids, wind barbs and/or arrows at specific grid points for vector grids.
    - GVECT: a parameter defining a vector grid, such as thermal wind, etc…
    - GFUNC: a parameter defining a scalar grid, such as pressure, temperature, etc…
    - Use "!" to separate variables for parameter settings for overlayed data in "gvect," "gfunc," and other parameters
  - GDVINT is a program that performs vertical interpolations from an input vertical coordinate to another vertical coordinate. The input file is specified in GDFILE, while the output file is specified in GDOUTF.
    - Input vertical coordinates using GVCORD, separating the input and output vertical coordinates by a slash. For example, if you want to change from pressure coordinates to vertical coordinate of theta, you would set gvcord = pres/thta. This includes the following:
      - PRES – pressure
      - THTA – potential temperature
      - HGHT – height above sea level
      - SGMA – sigma p
      - ETA – eta
      - ZAGL – height above ground level
- Creating a script (In this example, we'll call the file *myscript.csh*):
  1. Edit the file myscript.csh. (e.g., nedit myscript.csh &)
  2. First Line: #! /bin/csh -f, the –f flag tells the script not to read from the user's .tcshrc file. This will make the script more portable as will will not rely on any aliases in the user's .tcshrc file.
  3. Next Line: gdplot<<EOF (tells the script that commands will get their input directly from the script until EOF reappears in the script)
  4. Copy/Paste gdplot parameters from GDPLOT
  5. End with EOF (EOF = end of input to script)
  6. Save file in editor and exit editor.
- Use "nedit text.net"→"chmod 700 name of script" so determine who can edit the script
  - The "700" indicates that only the user can edit the script, while the "755" indicates that anyone is able to execute the script.
- When in doubt, use "gpend" to exit out (of GEMPAK plotting programs).