**Exercise: Building NetCDF**

1. Open up a web browser.
2. Go to your favorite search engine (e.g., Google).
3. Search for:

NetCDF

1. Go to the NetCDF website.
2. Click on the link for downloading the source code for the latest stable version for C/Fortran/C++.
3. Look for the link for the most recent stable release of bundled C, C++ and Fortran, and click on it.
4. Look for the link to the NetCDF Distributions page and click on it.
5. Find the gzipped tar file version.
6. Copy the location of that link by right-clicking on the link and selecting “Copy Link Location” or equivalent.
7. On Boomer, go into your ~/PPCC2012/ directory.
8. Create a directory to do this build in:

**mkdir NetCDF**

1. Go into that directory:

**cd NetCDF**

1. Download the NetCDF source code using this command; for example:

**wget http://www.unidata.ucar.edu/downloads/netcdf/ftp/netcdf-whatever.tar.gz**

(where whatever should be replaced by the version number).

1. “Untar” the compressed tar file:

**tar zxvf netcdf-whatever.tar.gz**

(where whatever should be replaced by the version number).

1. Go into the newly created NetCDF directory:

**cd netcdf-whatever**

(where whatever should be replaced by the version number).

1. Determine your current working directory:

**pwd**

1. Read the file named INSTALL, which has instructions for how to install NetCDF:

**more INSTALL**

 If you’re unfamiliar with the more command, ask someone for help.

1. Specifically, in the INSTALL file, look for “Building NetCDF with Classic Library Only.”
2. Again, determine your current working directory:

**pwd**

1. You’re going to install NetCDF into the current working directory, so in the configure step (below), the working directory that you discovered in the previous step is what you should use for the value of:

--prefix=

(where whatever should be replaced by the version number), with **one exception** as described below.

1. Perform the configure step, as described in the INSTALL file, with **one exception**: at the end of the directory name for -- prefix, append build, like so:

--prefix= /home/yourusername/PPCC2012/NetCDF/netcdf-whatever/build

(where whatever should be replaced by the version number).

This will probably take a few minutes, as the configure script examines the computer you’re on to see how best to build NetCDF.

1. Perform the make step, as described in the INSTALL file. This will probably take many minutes, because you’ll not only be building the code but also testing it (all automatically):

**make install check**

1. If you look in the subdirectory build/lib, you’ll see the NetCDF libraries:

**ls build/lib**