Matthew wrote a very concise tutorial for WRF that includes test data. You may need to alter the paths, however:

<http://wiki.chpc.ac.za/acelab:wrf>

Follow the guide closely and it should compile first time. It is important to get every step correct and ensure the 'make check' steps succeed. It can take over 30 minutes to try compile WRF every time, so mistakes are very costly.

There are two extra environment variables that may be required for WRF:

export DM\_FC=mpiifort

export DM\_CC=mpiicc

Additionally, several extra utilities are required, not specified in the guide:

yum install m4 csh perl perl5 -y

The following two links may also be useful for compilation, the second includes how to compile with pnetcdf (which will be too slow over 1GBe...):

<http://www2.mmm.ucar.edu/wrf/OnLineTutorial/compilation_tutorial.php>

<http://www.hpcadvisorycouncil.com/pdf/WRF_v3.8%20Installation_Best_Practices.pdf>

Using the pnetcdf library instead of netcdf may or may not be useful; compile both versions and compare their performance during the competition if you have time.