**Guide to Compiling and Running ISAT Cases in Linux**

1. Before beginning, the following libraries need to be installed: gcc, gfortran, lapack and blas.
	1. To check if gcc is installed, run *gcc --version* from a linux terminal. Similarly, you can check if gfortran is installed by running *gfortran --version* from the terminal.
	2. To install gcc and gfortran (if needed) run *sudo apt-get install gcc* and/or *sudo apt-get install gfortran* from a linux terminal.
	3. To install the lapack and blas libraries, run *sudo apt-get install libblas-dev liblapack-dev* from a terminal.
2. After installing the necessary libraries, cd to the ISAT source code directory in *Buildings/Resources/src/ISAT*.



1. Next, type *make* into the terminal to compile the ISAT library using the makefile. The library should be generated in the correct linux folder as shown below.





1. Open Dymola. From Dymola, open the package in the Buildings folder by clicking *File>Open* and selecting the package.mo in the Buildings folder.





1. Under the Buildings package in the tree, navigate to the ISAT folder by clicking *ThermalZones>Detailed>Examples>ISAT.* Double click on the model *ForcedConvection.*



1. Click on the *Simulation* tab in the lower right-hand corner to navigate to the simulation window.



1. Click *Commands>Simulate and plot*, located in the top menu as shown below. This will run a script that compiles and simulates the model and plots the results.



1. The model should simulate successfully, and the plots should be displayed as below.



