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Introduction to mini-app

How to compile and run the code on icsmaster

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Log-in to icsmaster with X-forwarding

- Log-in to icsmaster with X-forwarding
    - switch –X or –Y
    - You will need this for visualization of results

  ```
  $ ssh -Y icsmaster
  ```

- Load gcc and python modules

  ```
  $ module load gcc/6.1.0 python/2.7.12
  ```

- Update the git repository

  ```
  $ cd HPC_2018/
  $ git pull
  ```

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Compile and run the code

- Go to mini-app directory

  ```
  $ cd HPC_2018/Assignment4/miniapp_openmp/
  ```

- Use makefile to compile the code

  ```
  $ make
  ```

- Connect to compute node

  ```
  $ salloc
  ```

- Run the app on compute node

  ```
  $ ./main 128 128 100 0.01
  ```

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Visualize results

- The application generates two files with the final solution
  - output.bin
  - output.bov
- There is a Python script that converts these data files to png image

  ```
  $ ./plotting.py
  ```

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Visualize results (t=0.01)