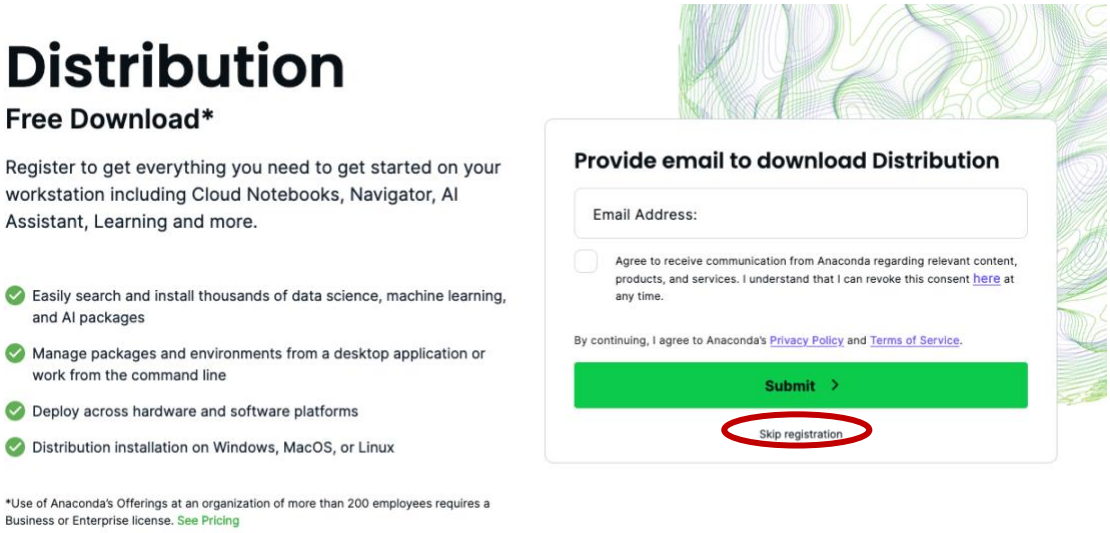
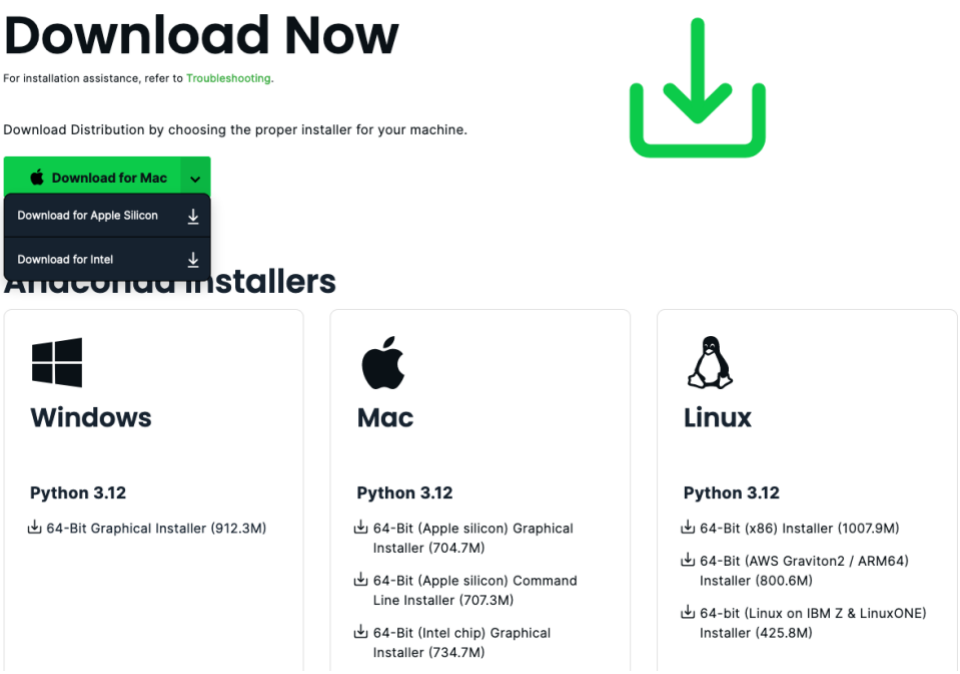
The instructions given here are not comprehensive of all the options for installing OpenFAST. Other options can be found in the OpenFAST documentation: https://openfast.readthedocs.io/en/main/source/install/index.html#

Mac systems

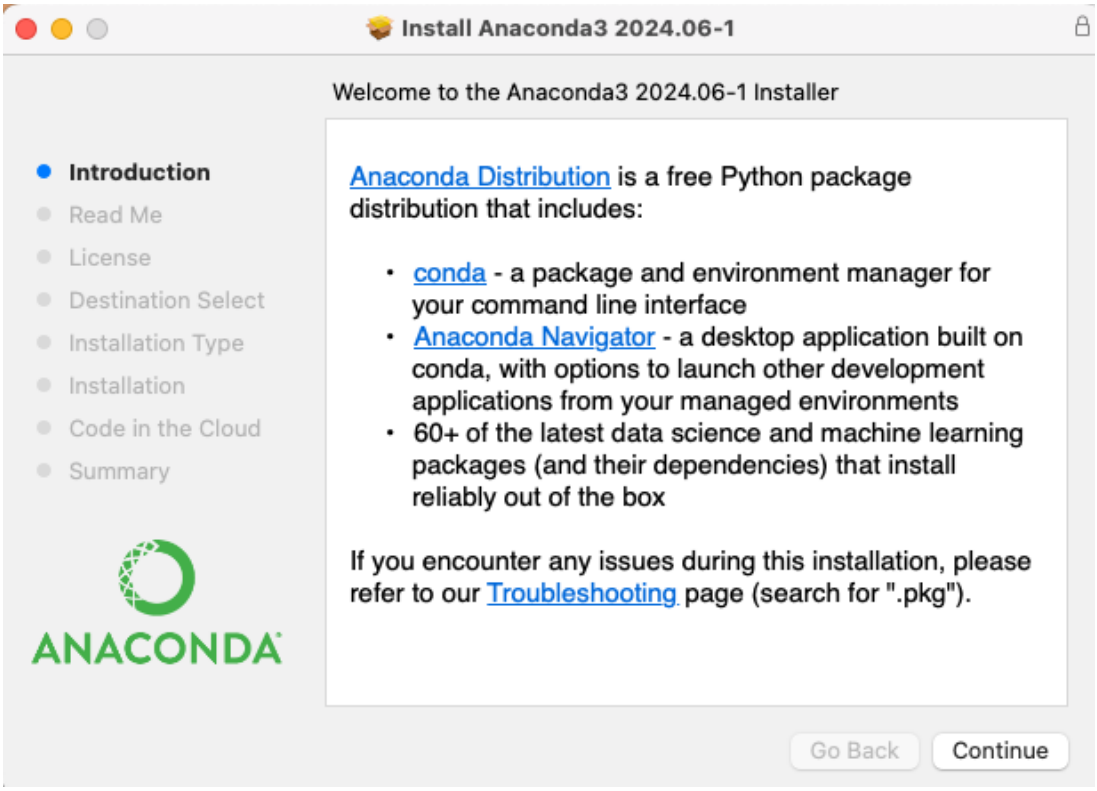
1. OpenFAST can be installed through conda, which requires an Anaconda installation. If Anaconda is already installed on your system, you can skip to step 3. There are several different ways to install Anaconda. One option is directly through the Anaconda website (https://www.anaconda.com/download). You can hit “skip registration” if you prefer not to provide your email address.



Then, choose the “Mac” download and select either “Download for Apple Silicon” or “Download for Intel”, depending on your processor. Instructions for determining your processor type can be found here: https://support.xtool.com/article/643.

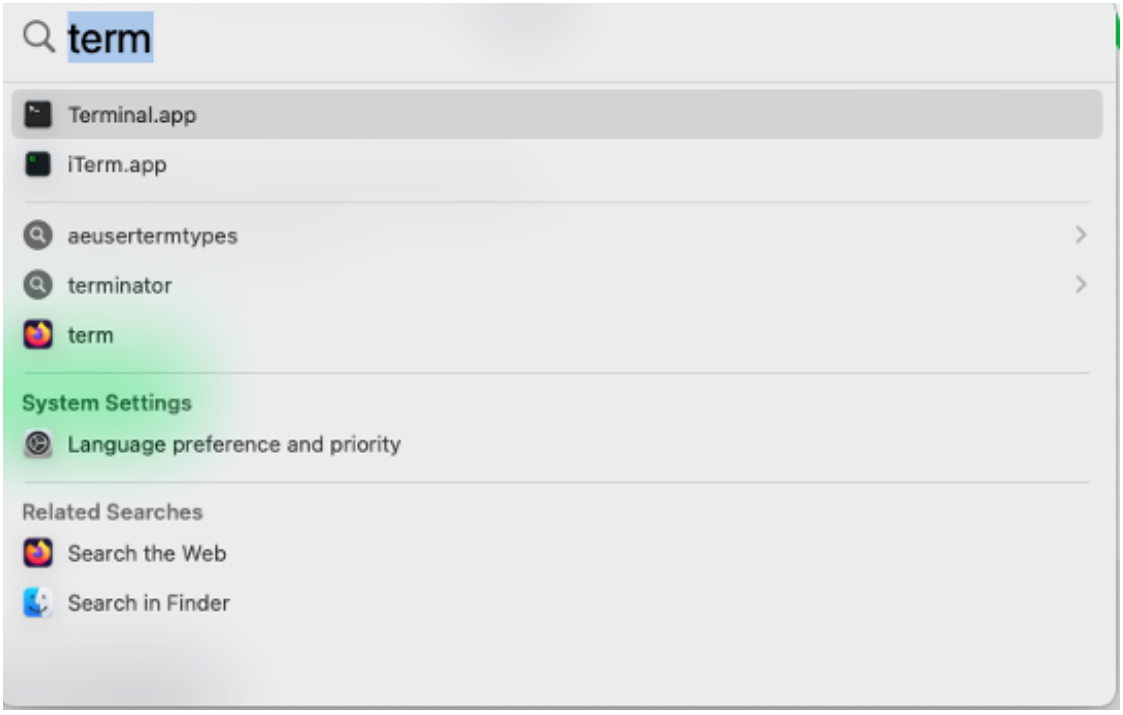


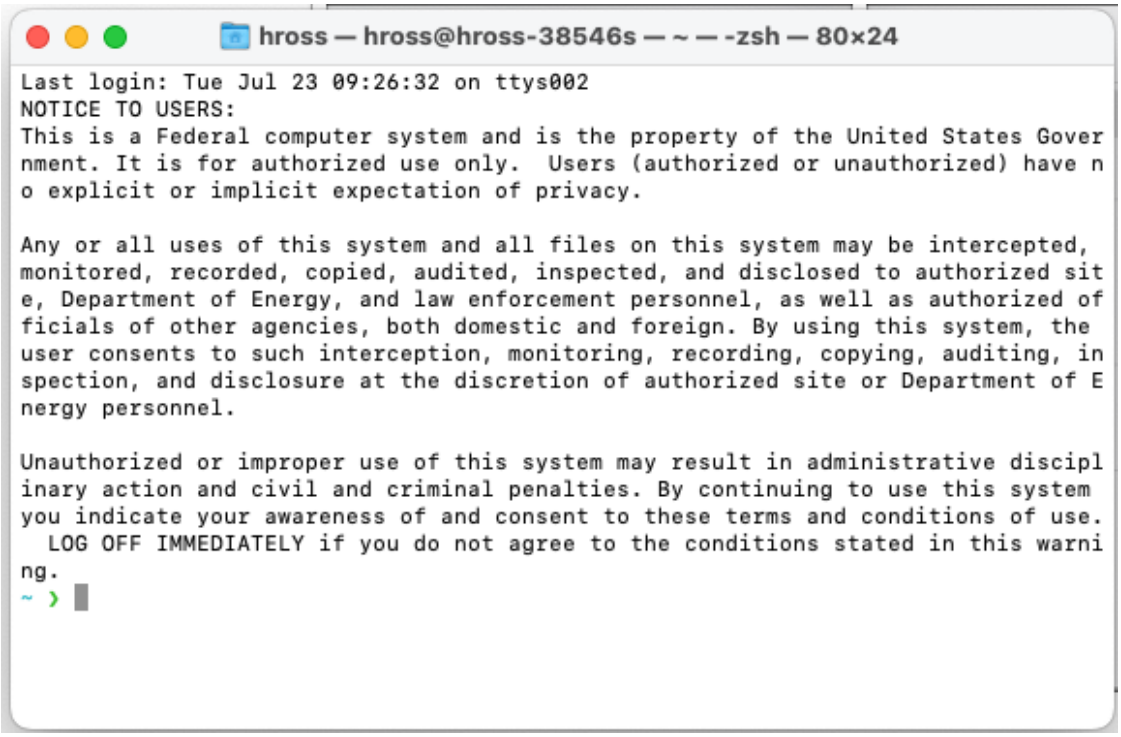
Find the installer download in your Downloads folder, and double click on it. Follow the prompts to install Anaconda. Selecting the default install options when relevant should be sufficient.



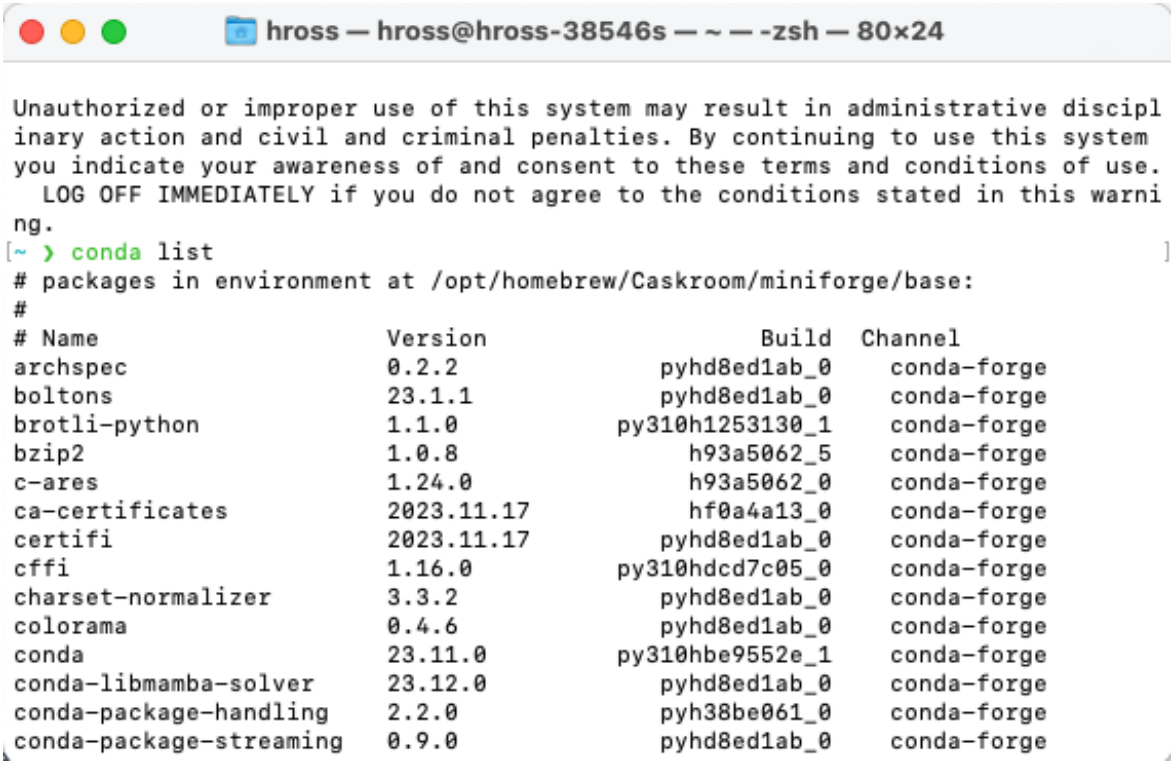
Another option to install Anaconda is through the Homebrew package manager. Detailed instructions for this method will not be covered here but can be found at the following link: https://medium.com/ayuth/install-anaconda-on-macos-with-homebrew-c94437d63a37.

2. Now test that your Anaconda installation is successful. Open a terminal by searching for and opening "Terminal.app" (the default Mac terminal), or your preferred terminal if others are installed.





Type `conda list` into the terminal. This command displays a list of packages installed in your active environment and their versions and will only execute if your Anaconda installation is successful.

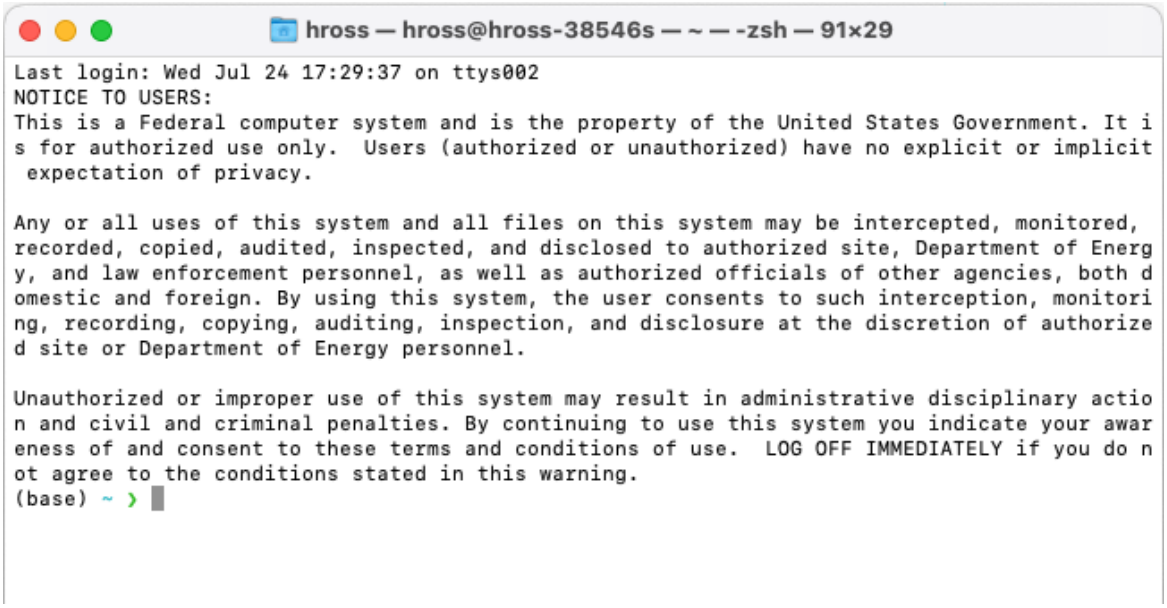


3. Now, create a new conda environment for OpenFAST: `conda create -n openfast_env`

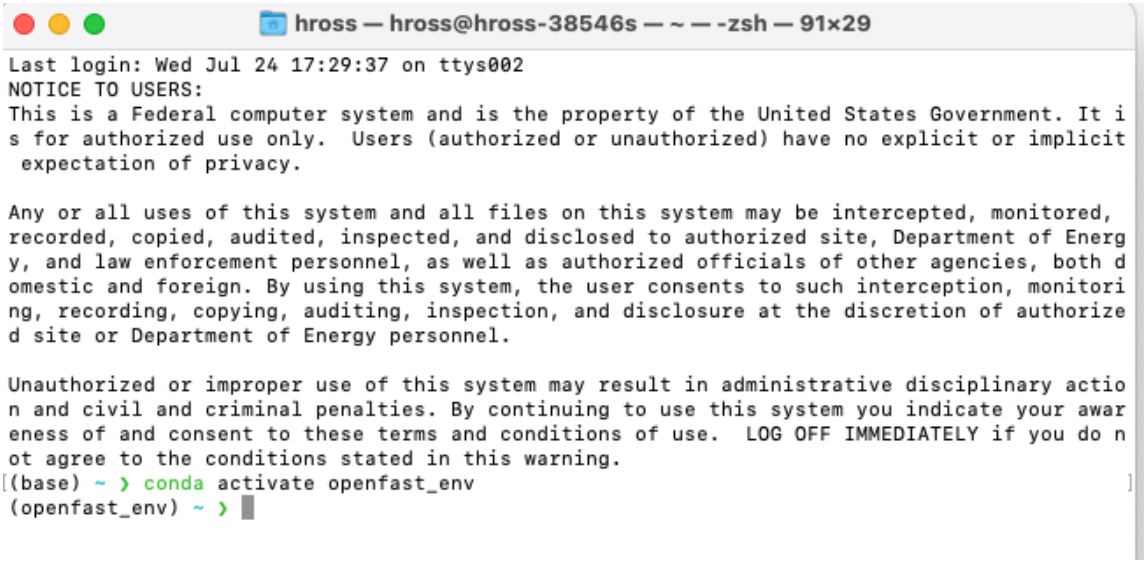
Run `conda init zsh`

Note that `zsh` may need to be replaced by your shell name, which should be displayed at the top of your terminal.

4. Close and reopen your terminal



5. Activate the environment: `conda activate openfast_env`



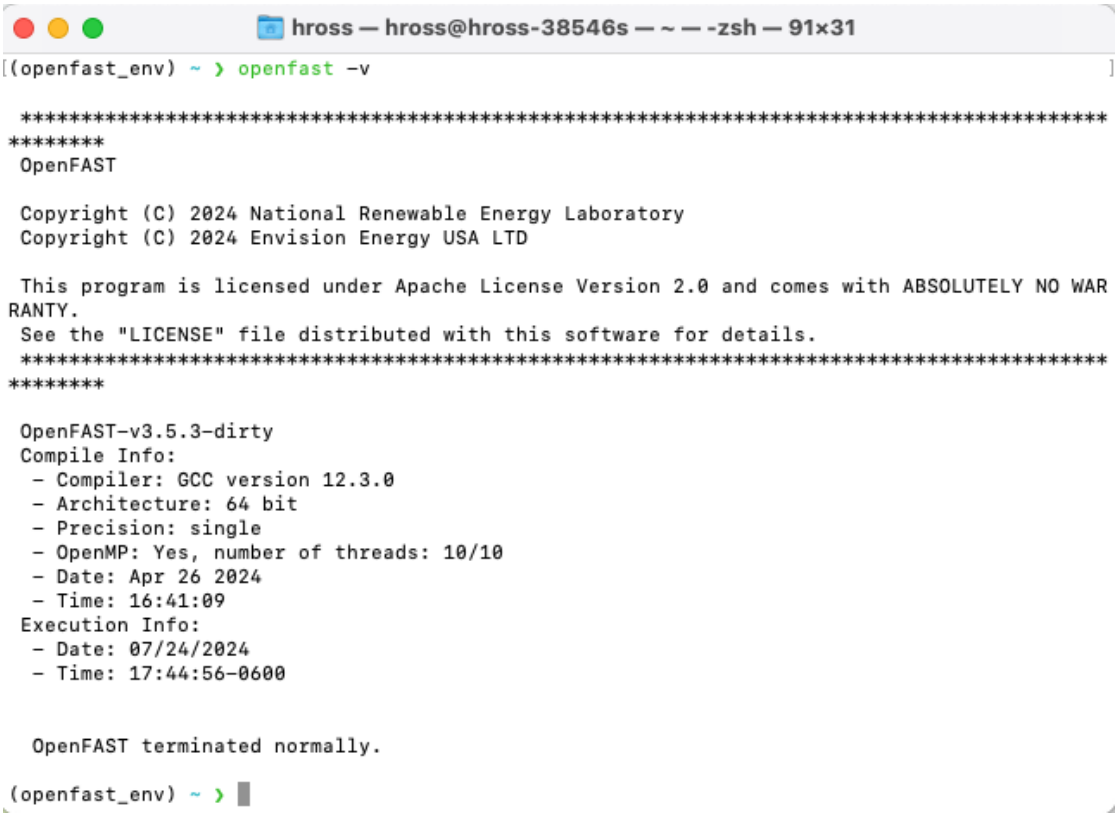
6. Install OpenFAST: `conda install -c conda-forge openfast`. This will install the most recent version of OpenFAST.

```
hross — hross@hross-38546s — ~ — -zsh — 91×29
(openfast_env) ~ ❯ conda install -c conda-forge openfast
Channels:
 - conda-forge
Platform: osx-arm64
Collecting package metadata (repodata.json): done
Solving environment: done


==> WARNING: A newer version of conda exists. <==
    current version: 23.11.0
    latest version: 24.5.0

Please update conda by running

    $ conda update -n base -c conda-forge conda



## Package Plan ##

  environment location: /opt/homebrew/Caskroom/miniforge/base/envs/openfast_env

  added / updated specs:
    - openfast
```

7. Test that OpenFAST was installed correctly: `which openfast`. This will display the installation location.

```
hross — hross@hross-38546s — ~ — -zsh — 91×29

The following packages will be downloaded:

    package                    |            build
    ---------------------------|-----------------
    libcxx-18.1.8              |       h167917d_0         1.2 MB  conda-forge
    ------------------------------------------------------------
                                           Total:         1.2 MB

The following NEW packages will be INSTALLED:

  libcxx             conda-forge/osx-arm64::libcxx-18.1.8-h167917d_0
  libgfortran        conda-forge/osx-arm64::libgfortran-5.0.0-13_2_0_hd922786_3
  libgfortran5       conda-forge/osx-arm64::libgfortran5-13.2.0-hf226fd6_3
  llvm-openmp        conda-forge/osx-arm64::llvm-openmp-18.1.8-hde57baf_0
  openfast           conda-forge/osx-arm64::openfast-3.5.3-hbd8d116_0


Proceed ([y]/n)? y


Downloading and Extracting Packages:

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
(openfast_env) ~ ❯ which openfast
/opt/homebrew/Caskroom/miniforge/base/envs/openfast_env/bin/openfast
(openfast_env) ~ ❯
```

You can also run openfast -v, which will display version information. Successful running of these commands indicates that OpenFAST was installed.

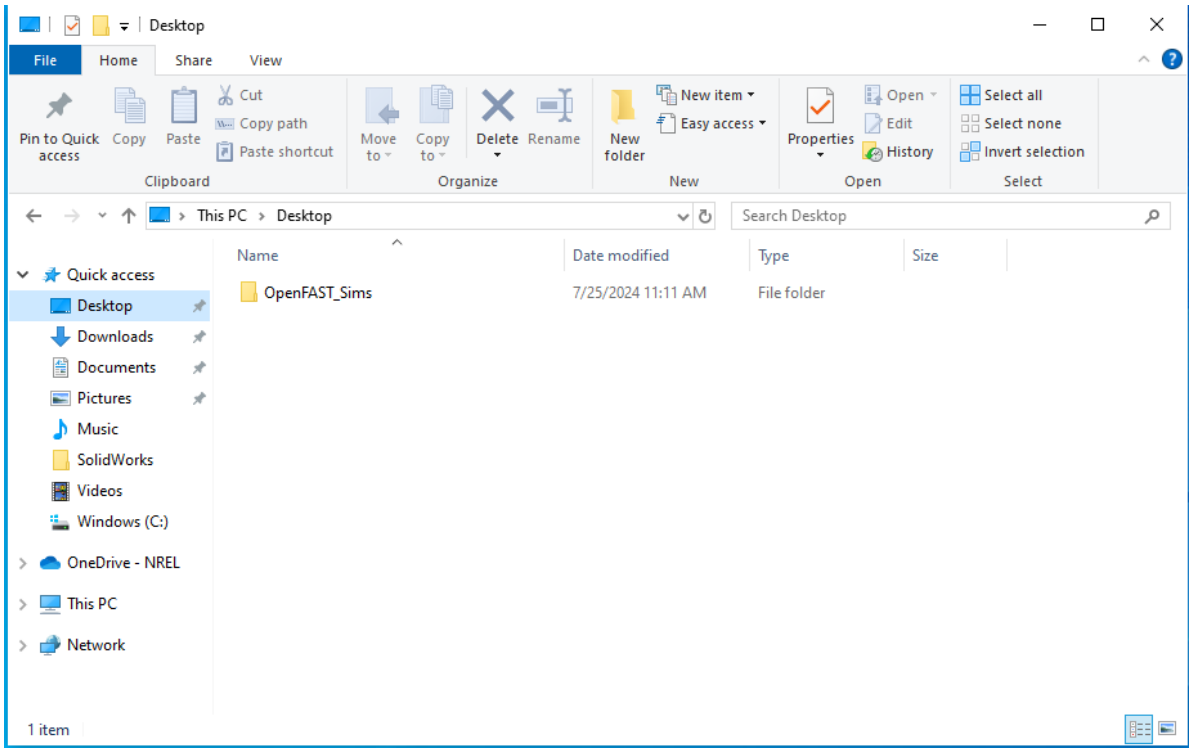


8. After working with OpenFAST, you can simply close the terminal.

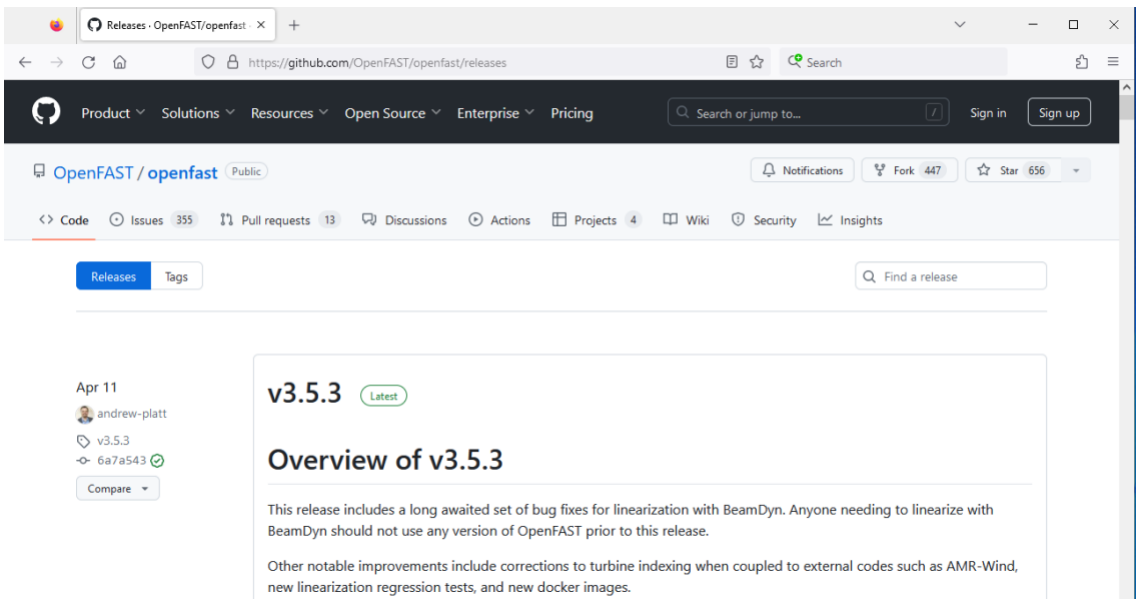
   Note that this method will also install module drivers, if available. These allow you to run individual modules (i.e., AeroDyn, HydroDyn) on their own.

Windows systems

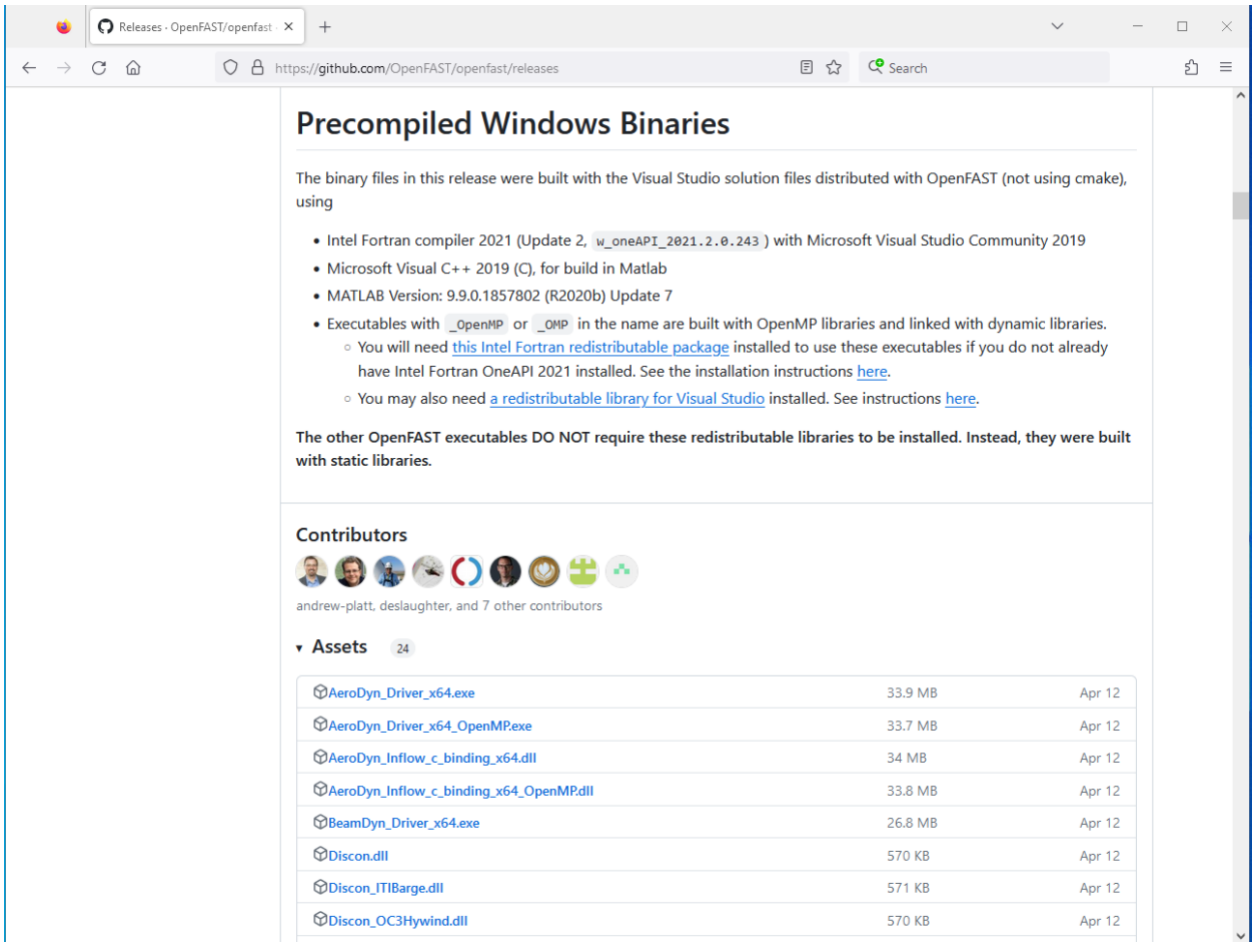
1. Create a new folder for your OpenFAST simulations. I've created a folder on the desktop called "OpenFAST_Sims", but you may want to create the folder in a different location.



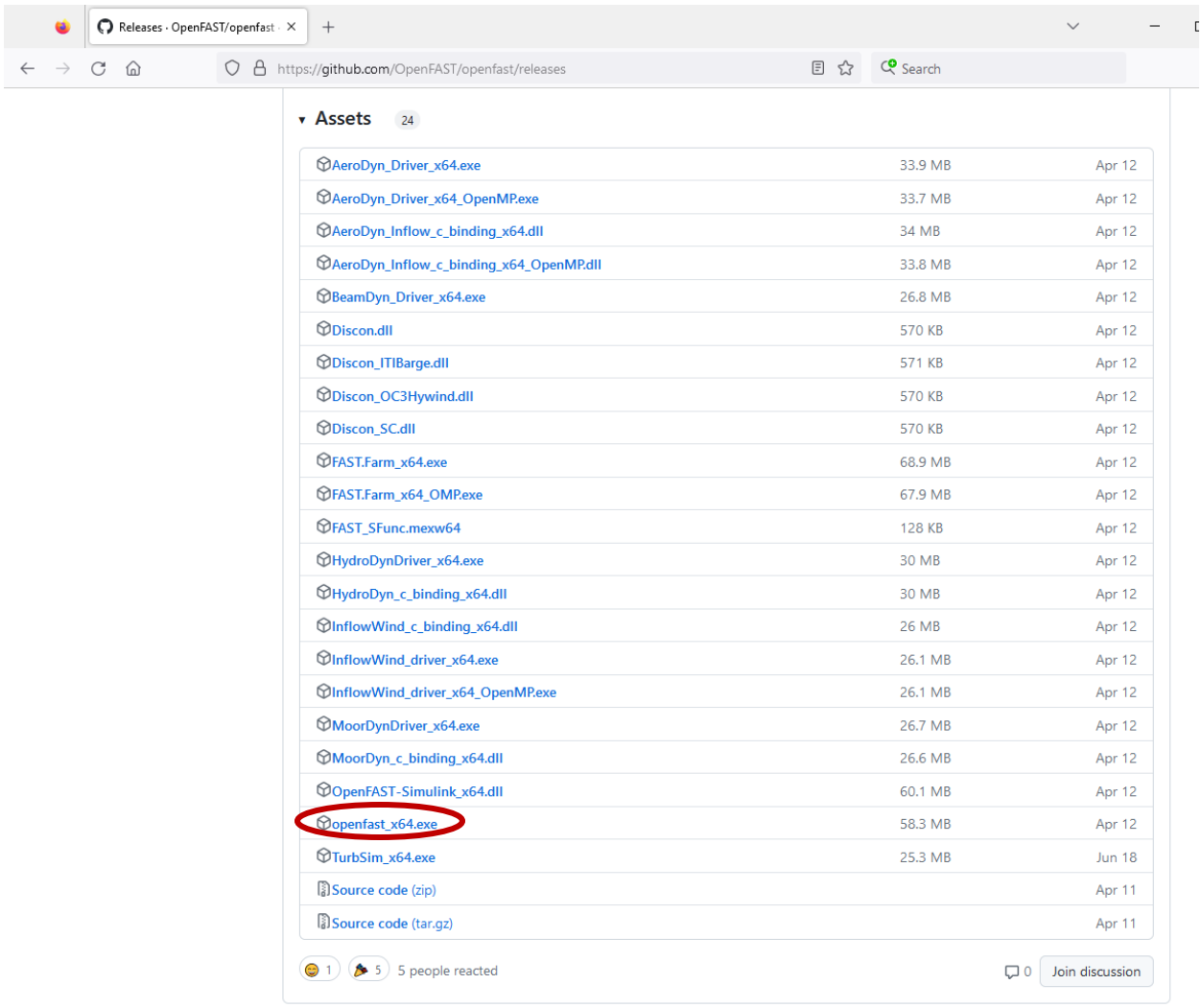
2. Go to the OpenFAST releases GitHub page: https://github.com/OpenFAST/openfast/releases. The latest release will be shown at the top of the page.



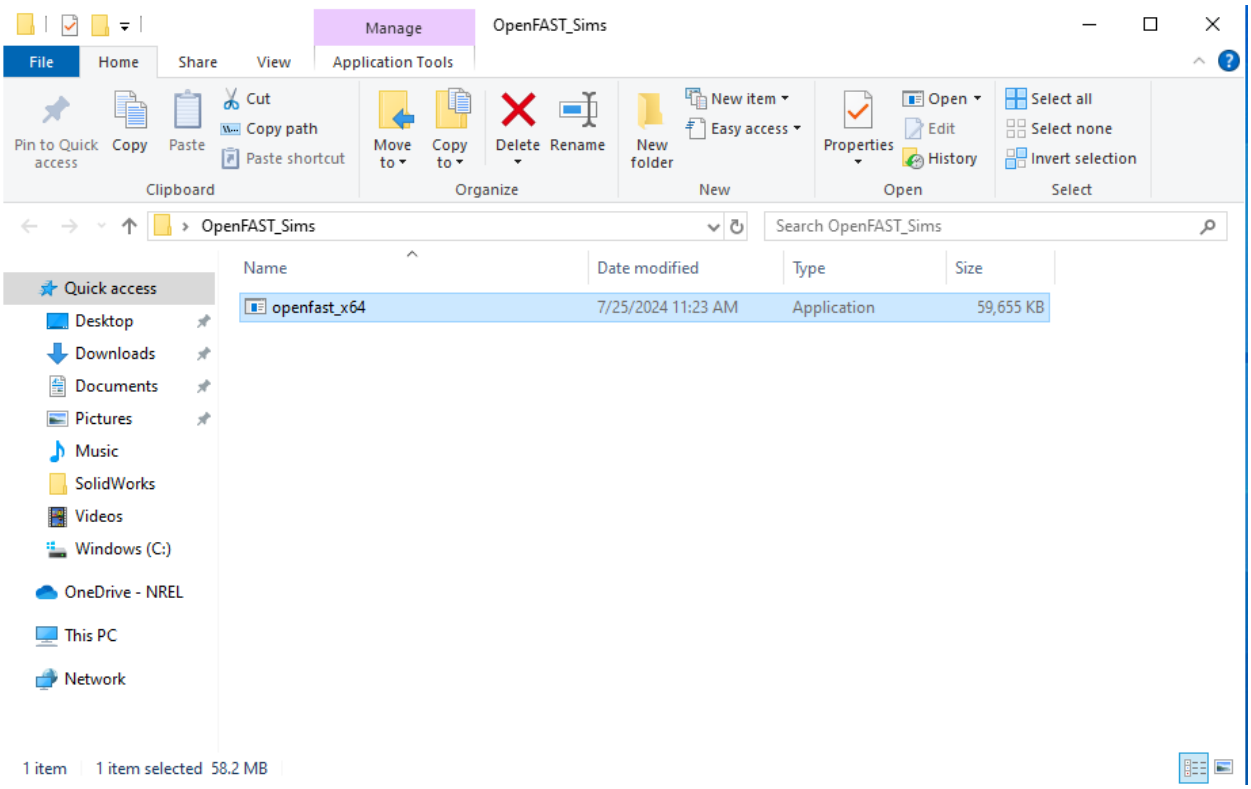
3. Scroll down to the “Assets” header. Note that each version has it own set of Assets, so make sure to select the most recent version, unless you intentionally want to use an older release.



4. There is a list of executables corresponding to the different ways you can run OpenFAST. Here, we will install only the main OpenFAST program (openfast_x64.exe).



5. Click on “openfast_x64.exe” and find the downloaded file (most likely in your Downloads folder). Move this file to the folder you created to host your OpenFAST simulations.



6. This is all that is required to install OpenFAST on Windows.