Preparing for the CICE Consortium Tutorial

We want to be ready to start immediately during the first activity on day 1 of the tutorial. **The following steps should be done before the tutorial** so you have some basic familiarity with the GitHub code repositories from which we will be cloning code to use.

Starting with GitHub

All of the CICE Consortium model code is freely available on GitHub. GitHub is the base from which you will find the Consortium code, documentation, etc. *If you do not already have a free GitHub account, you should create one (*https://github.com/join*) that you will use during the tutorial.* ***Please have a GitHub account before the tutorial starts***.

CICE Consortium GitHub page

Take a quick tour of the CICE-Consortium GitHub page:
https://github.com/CICE-Consortium

- The "CICE-svn-trunk" repository contains versions of CICE prior to version 6 and are not being developed further.

- The "CICE" repository contains CICE version 6 and later, and it is currently being developed.

- The "Icepack" repository contains all versions of Icepack, and it is currently being developed.

1. Each repository has a green button on the right hand side of the page that says "Clone or download". If you click this, it will provide a URL for the Consortium repository.

2. Look at the branches and tags

   a. The "master" branch is the version of the code with the most up to date developments. While the master branch is stable, it is not recommended to use this for science, however, because it is constantly changing without notice and may change your results dramatically as new developments are added.

   b. In any repository you can look at the numbered releases by clicking the "# releases" button in the middle of the page or by looking at the drop down menu under "Branch: master" on the left side of the page and selecting a "tag". These are official released versions of the code.

Documentation through GitHub

1. There is a single resource index page for the Consortium
   (https://github.com/CICE-Consortium/About-Us/wiki/Resource-Index). This page is the best

place to go when looking for information about CICE and Icepack. Look through it briefly to get a better sense of the information it provides.

2. Find the links to the HTML and PDF versions of documentation for the Icepack and CICE repositories. These will be referenced in the tutorial and knowing how to open these documents will be very useful throughout the tutorial.

Creating your own Forks

1. In the upper right hand side of the Consortium repository there is a button that says "Fork". When you click fork, you create a copy of the CICE or Icepack repository in your <u>own</u> GitHub account (e.g. https://github.com/<username>/CICE).

2. Fork both the CICE and Icepack repositories for this tutorial - ***please complete this for both repositories before the tutorial starts.***

    Note: If you have already forked the Consortium GitHub repositories you will want to make sure that your master branch is up to date with the most recent changes to the Consortium master branch. Please see the Resource Index (link above) to get information from the Git Workflow Guide on how to update you GitHub Fork Master on the first day of the tutorial.

3. Go to your personal fork (e.g. https://github.com/<username>/CICE) and you will see the green "Clone or download" button described above. ***The URLs provided here will be needed during the tutorial, so take note of them.***

You should always create forks to develop the code so that you can have a remote backup of your code modifications. Additionally, you can commit any changes you make during the tutorial and keep them in your personal repository for future reference. If you make changes and want to add them to the Consortium "master" code that is developed and eventually released, you will need to do a Pull Request from your fork. More information about the code development process can be found in the Consortium documentation available on GitHub.