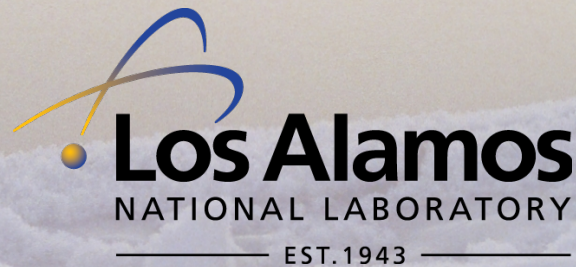


Community models from the LANL/CICE perspective

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User community

- CICE has a large and varied user base
 - Used in 20 countries
 - Academic users
 - Large institutions
 - Fully coupled climate models
 - CESM
 - UK MetOffice (HadGEM and the UM)
 - US Navy (ACNFS, the Arctic Cap Nowcast/Forecast System)
 - Australian Community Climate and Earth System Simulator (ACCESS)
 - Norwegian Earth System Model (NorESM)

User community

- Users divide into two groups
 - Those that make small or no modifications
 - Use the publically released code
 - Those that make large modifications/add significant new capability
 - Are “collaborators” and have access to development versions of the code
 - Add significant new capacity to model (new melt pond schemes, rheologies)
 - Large institutional users who make modifications to the code to allow it to run in their climate models (CESM, UK Met Office, US Navy)

Two tiered system advantages

1. Makes code more robust via use with different compiler/machines/architectures
2. Gives institutional collaborators head-start for getting newest versions running in their configurations
3. Allows new developments to be merged more easily since code base has diverged less
4. Collaborators get the bugs out before general release

What do we provide to users?

- a. Instructions on downloading code & data
- b. A basic case for getting started (gx3 on CICE)
- c. Detailed documentation
 - How to set up and compile the code
 - How to run the code
 - Output description
- d. A clear description of what is NOT supported
 - Forcing data generation
 - Scripts for analyzing output
 - Machine/operating system help
- e. How we want code and ourselves cited in publications – collaboration agreement

Adding user contributions

- New additions rejected if mess up someone else's configuration
- Specialist configurations turned off with preprocessor directives or namelists
- New additions must pass extensive tests
 - Bit for bit exact restarts
 - Bit for bit identical answers with addition switched off
 - Bit for bit parallelization checks
 - Compilations error with bounds checking etc.
 - etc.