CICE Consortium 2020 User's Workshop

Welcome to NCAR!

CICE and Icepack Workshop and Tutorial   February 3-5, 2020

Community Discussion

Follow up on morning presentations

- Questions or clarifications from the Consortium speakers? From each other?

Community interests

- Explore the relative balance between interest in sea ice itself and interest in its interactions with the larger system.

- Are workshop participants studying processes, polar/global climate, or interested in forecasting, policy, stakeholder issues?

- What new and exciting science problems are looming?

- Are current tools up to the job?

- If not, what is needed?

- Who is implementing them?

- How can we help foster community collaborations?

Consortium-specific questions

Physics:

- We have a number of new capabilities and upgrades planned. What is missing?
- Should we remove anything (e.g. 0-layer; upwind advection)?

Modeling requirements:

- Are more or different analysis tools needed?
- Data assimilation? Integration of observations in other ways?
- Optimization?
- Should we implement netCDF for Icepack?

Long term direction:

- Should we expand by incorporating other sea ice models or model components?
- Shrink to just Icepack?
- Is it desirable (or even possible) to maintain fundamentally different dycores as part of a modeling framework?
- Funding and continued support

Communication:

- How can we improve communication and collaboration channels?
- What are the biggest gaps in what the Consortium provides, for meeting the community's needs?

How can we help?

General questions

- Are there current sea ice modelling practices slowing scientific progress?

- Should the sea ice modelling community improve modularity among different model sub-components to develop modular, interchangeable components that can be plugged into a generic framework? If so, how fine should the granularity be?

- Should the sea ice modelling community work toward one model or set of tools that everyone uses for many different purposes, or toward providing a diversity of model choices even for the same purpose?

- How open is the community to using a general modeling framework (e.g. unstructured grids) that can be configured to mimic simpler systems (e.g. quadrilateral grids)? Is the extra complexity worth it?

- Should analysis, evaluation and calibration tools (including data assimilation) be included within sea ice modelling repositories?