CICE/Icepack Users Workshop & Tutorial, February 3-5, 2020 - Summary





- 10 US universities, Poland, Australia, Norway; NSF merit-based support for 13 domestic students/postdocs.
- Workshop and tutorial presentations are available: http://www.cesm.ucar.edu/events/2020/cice-icepack/
- Tutorial participants performed quality control tests, compared CICE standalone and coupled results.
- It is <u>very</u> important to use CICE6 and Icepack as soon as possible to enable code sharing.
- User's Workshop action items:
 - Improve repositories and documentation: e.g. provide netcdf output from Icepack, document how to add Icepack diagnostic output, remove deprecated code, etc.
 - Reach out to the community through IARPC, AGU, ARCUS, IGS conferences, etc.
 - Set up topical, short-term working groups:
 - Snow on sea ice
 - Radiation effects including spectral emissivity
 - Data assimilation
 - Wave modeling
- Longer-term physics priorities:
 - > Dependence of rheology on model resolution
 - Snow on sea ice
- Challenges Ongoing Discussion:
 - ➤ Interest on focusing effort on coordinating data and metrics against which community can evaluate and benchmark models rather than coordinating model analysis tools.

- Validating the floe size distribution
- C-grid dycore
- Freshwater ice (lakes, iceberg interactions with sea ice)
- Boundary conditions for regional configurations
- Validating/improving sea ice hydrology (e.g. brine drainage, stability at the ice-ocean interface for nutrient exchange, double diffusive mechanisms)
- Extent of support for stand-alone models.
- > Porting from development versions of the models.
- Software engineering assistance for model developers.
- Reacting to changing computing platforms







• The Consortium Community Forum is the best place for discussion of these and other topics: https://github.com/CICE-Consortium/About-Us/wiki/Resource-Index