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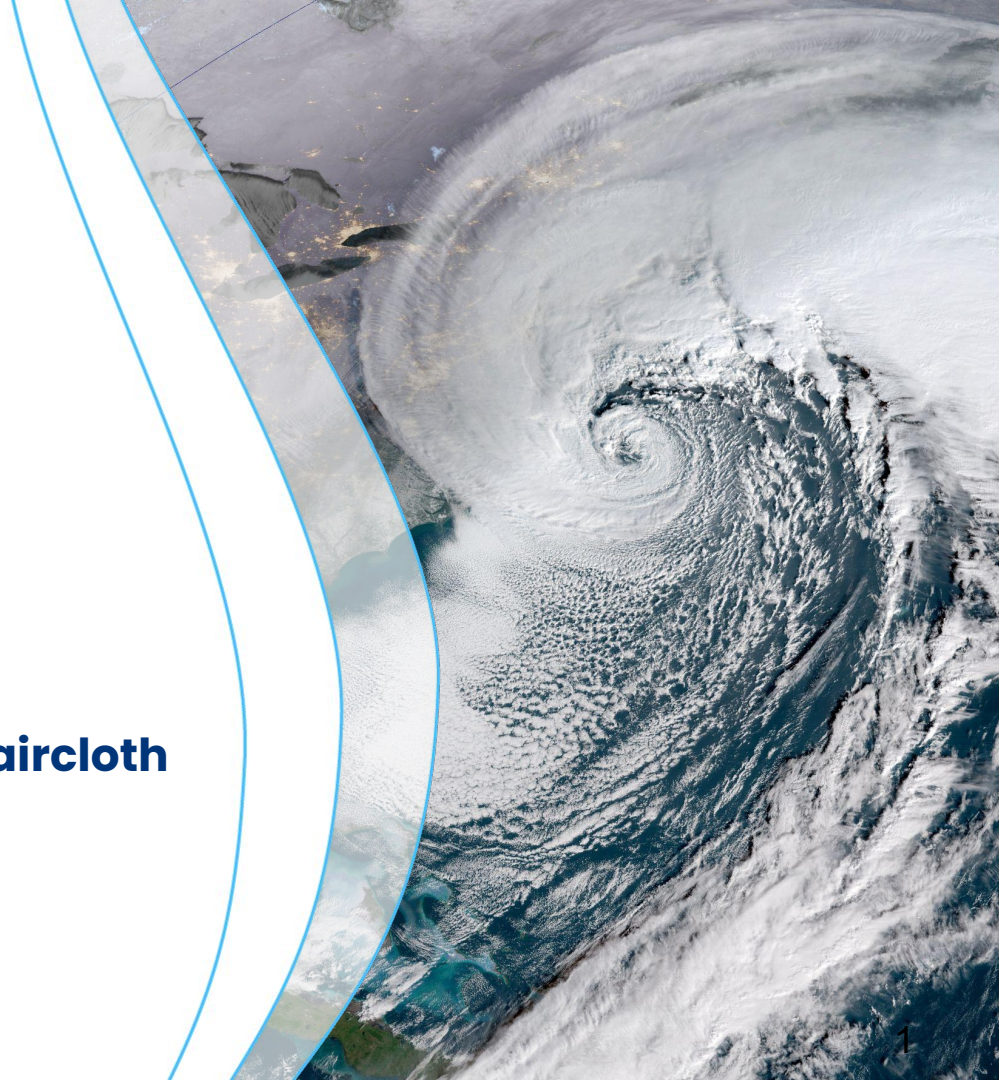
July 10, 2026

2026 CESM Tutorial

Daily logistics

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Agenda



- 8:30–9:00 Simpler Models (*Isla Simpson*)
- 9:00–9:30 Machine Learning (*Katie Dagon*)
- 9:30–09:45 Break (coffee and snacks)
- 9:45–10:15 Earth System Prediction (*Kirsten Mayer*)
- 10:15–10:30 Intro to Lab: breakouts (*Multiple speakers*)
Cecile (atmos), Jiang (paleo), Gunter (land ice), Dave Bailey (sea ice), Rebecca Buchholz (chemistry), Erik (land & fates), Kristen (biogeochem), William (ocean), Charlie (machine learning)
- 10:30–12:00 Lab exercises (*Library*)

- 12:00–1:15 Lunch on your own + activities
ML Public Tour (Meet at noon *front door*)

- 1:15–1:45 Variable resolution (*Adam Herrington*)
- 1:45–2:00 Break
- 2:00–2:30 The Ethics of Earth System Modeling (*Monica Morrison*)
- 2:30– 4:00 Lab exercise (*Library*)
- 4:00–4:20 Wrap up, Daily check-in, Survey
- 4:30 Shuttle Departs ML

Reminders



- Submit NCAR merch order by **noon today**
- Take a “CESM selfie” during the breaks and tag **@ncar_cgd**
- Optional **lunch with Gokhan** Danabasoglu today

Lab Documentation



<https://ncar.github.io/CESM-Tutorial/README.html>

Rough guidelines for the lab

Day 1: Basics

Day 2: Simple xml modifications

Day 3: Namelist, Troubleshooting, Source Mods

Day 4: Diagnostics

Day 5: Challenge exercises

BUT

This is a **self-paced lab**.

We all come from different backgrounds.

Some people will move faster, and some will move slower. It's completely okay.

The screenshot shows the NCAR CESM Tutorial README page. On the left is a navigation menu with links: Introduction, Prerequisites for Success, Basics, Simple XML Modifications, Namelist Modifications, Troubleshooting runtime errors, Source Modifications, Challenge Exercises, Diagnostics, and Resources. The main content area is titled 'Welcome to the CESM Tutorial' and contains the following text: 'In 1983 NCAR created the Community Climate Model (CCM) as a freely available global atmosphere model for use by the climate research community. The scope of CCM development continued to expand and in 1994 NCAR scientists released the Climate System Model (CSM), a global model that included component models for the atmosphere, land surface, ocean, and sea-ice, communicating through a central coupler component. To recognize the broad community of users and sponsors contributing to this effort, the CSM was renamed the Community Climate System Model (CCSM). The CCSM model evolved to include ice sheet and biogeochemical modeling and was renamed the Community Earth System Model (CESM) in 2013.' It also states: 'This repository includes materials designed to be an introduction to running the CESM. The materials were developed to support the CESM tutorial and serve as reference documentation for all CESM users.' Below this is a section 'Goals of This Tutorial' with the text: 'Through this online tutorial you will learn how to run the CESM model, modify the model experiments, and use the model output. These tutorial materials are designed for the CESM version 2 (CESM2)'. The next section is 'Yearly In-Person Tutorials' with text: 'The CESM tutorial was started in 2010 and is typically offered as an in-person summer workshop. If you are interested in attending the tutorial, please see the CESM webpage for the most up to date information about when the tutorial will next be offered in Boulder, Colorado and the timeline for applying.' The final section is 'CESM Project Funding' with text: 'This material is based upon work supported by the National Center for Atmospheric Research (NCAR), which is a major facility sponsored by the National Science Foundation (NSF) under Cooperative Agreement No. 1852977. Staff time on this project was also supported by the Climate and Global Dynamics (CGD) laboratory.'