



NCAR
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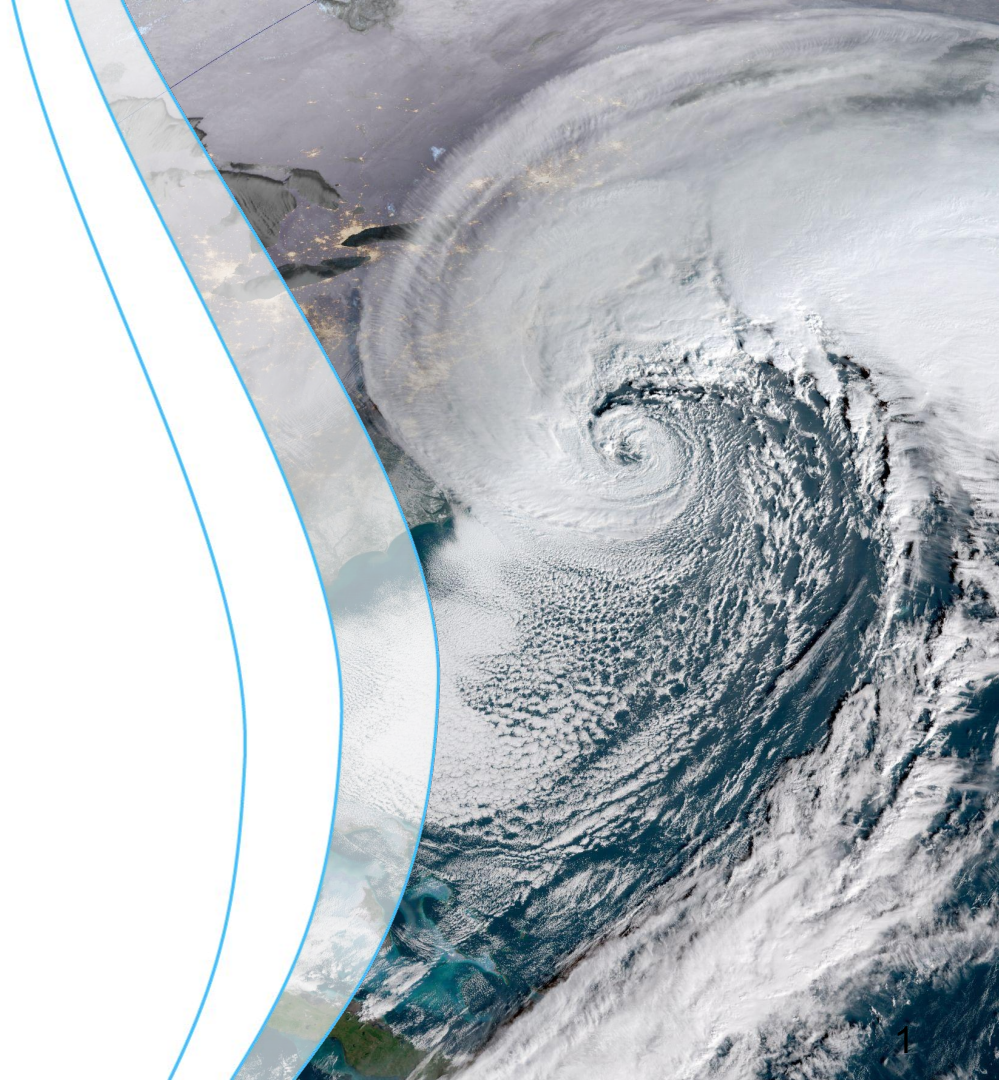
July 7, 2026

2026 CESM Tutorial

Daily logistics

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Faircloth**
NCAR CGD

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Agenda



8:30–9:15	Land Modeling I: Biogeophysics (<i>Will Wieder</i>)
9:15–9:30	Break (coffee)
9:30–10:15	Land Modeling II: Biogeochemistry/ecosystems (<i>Adrianna Foster</i>)
10:15–10:30	Break (snacks)
10:30–10:45	Intro to Lab: XML changes (<i>Sophia Macarewich</i>)
10:45–12:00	Lab exercises (<i>Library</i>)
12:00–1:15	Lunch on your own + activities 12:00–1:00: ML private tour (Meet at noon <i>front door</i>) 12:15–1:00: Meet an expert (<i>Breakout rooms</i>)
1:15–2:00	Sea-Ice Modeling (<i>David Clemens-Sewall</i>)
2:00–2:15	Break
2:15–2:25	Lab exercises check in
2:25–4:20	Lab exercises (<i>Library</i>)
4:20–4:35	Daily debrief
4:45	Shuttle Departs ML



- Elizabeth emailed assignments/rooms Tue, Wed, Thurs
- Refer to maps in intro slides to find room or ask us!

<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

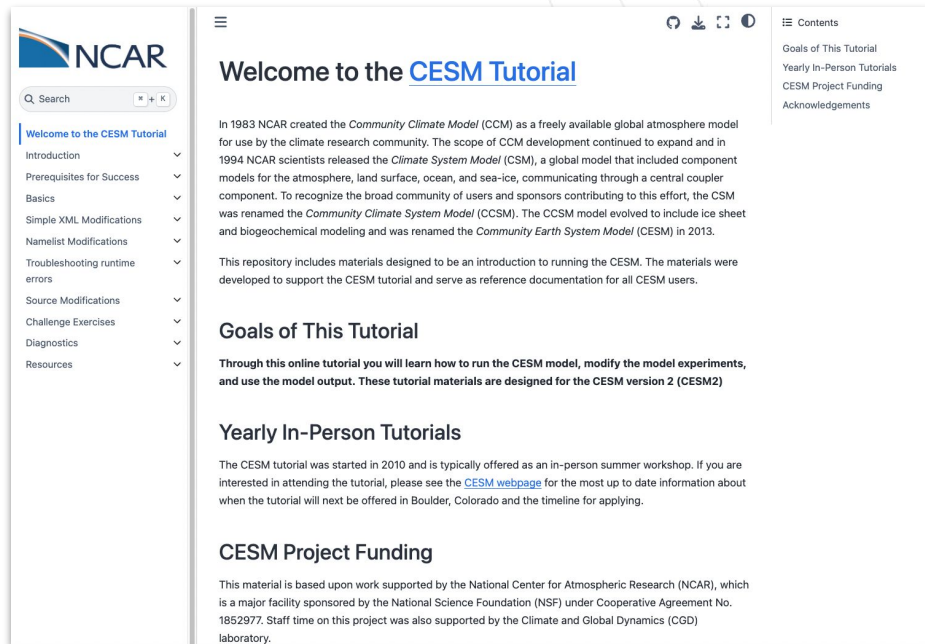
Day 4: Diagnostics

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.

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.

Goals of This Tutorial

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)

Yearly In-Person Tutorials

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.

CESM Project Funding

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On the right side of the page, there is a "Contents" sidebar with links: Goals of This Tutorial, Yearly In-Person Tutorials, CESM Project Funding, and Acknowledgements.