2025 CESM Tutorial

Day 4 Daily Logistics

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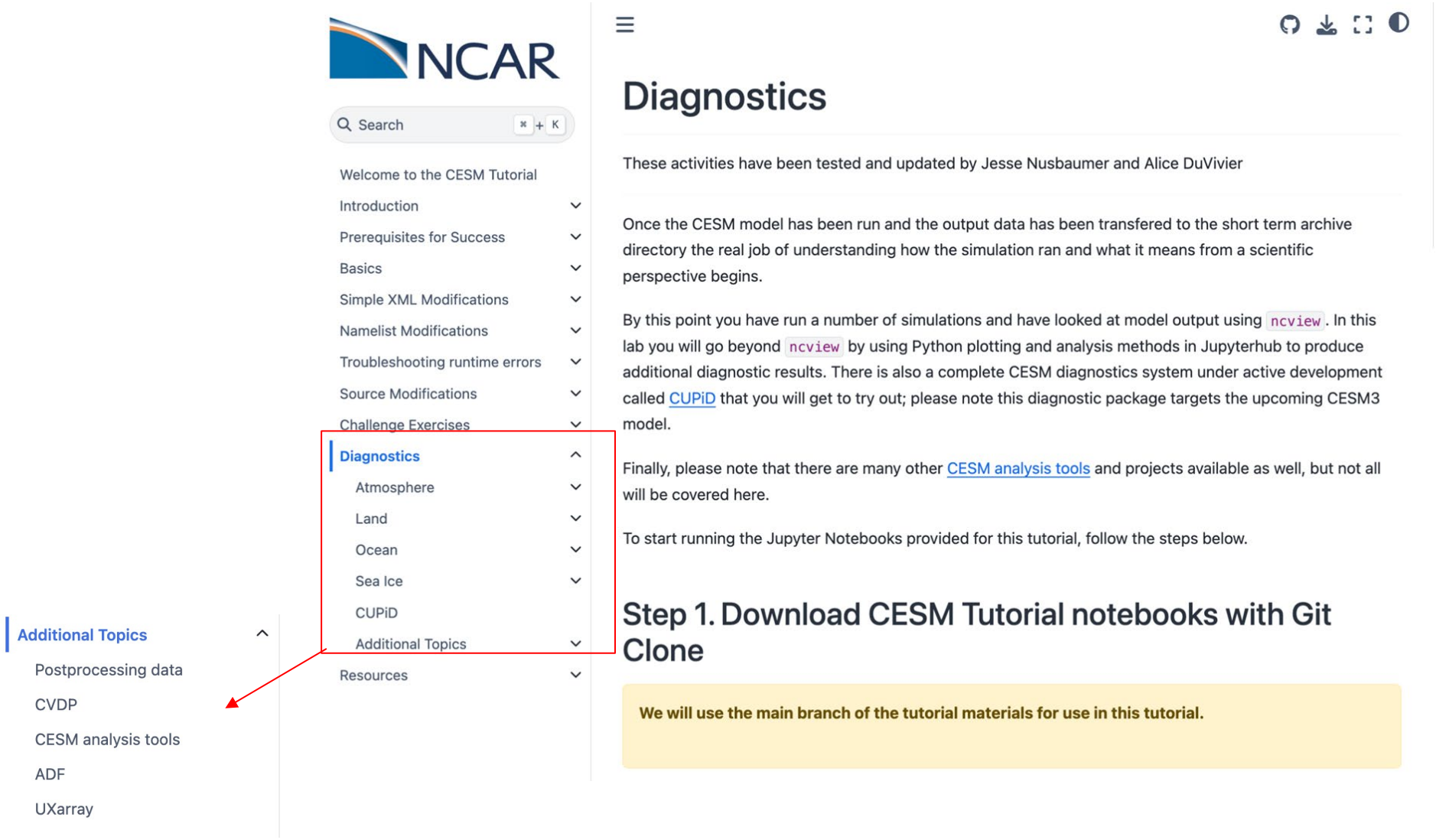
Agenda

Thursday, July 10

8:25-8:30	Daily logistics
8:30-9:00	CAM-chem (*Rebecca Buchholz*)
9:00-9:15	Break (Group photo)
9:15-9:45	WACCM (*Mijeong Park*)
9:45-10:15	Break (CESM cafe)
10:15-10:45	Climate Variability (*Clara Deser*)
10:45-11:00	Intro to Lab: diagnostics (*Jesse*)
11:00-12:00	Lab exercises (**Library**)
12:00-1:15	Lunch on your own + activities
	ML private tour
	Meet a scientist (**Breakout rooms**: 12:15-1:00)
1:15-2:00	Land Ice Modeling (*Gunter Leguy*)
2:00-2:15	Break
2:15-2:45	Paleoclimate (*Sophia Macarewich*)
2:45-2:55	Lab exercises check-in
2:55-4:20	Lab exercises (**Library**)
4:20-4:35	Daily debrief
4:45	Shuttle Departs ML

Lab documentation

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



survey on scientific computing

What are your Biggest Software Struggles with CESM Code?

This is a small informal survey for scientists who work with code in CESM (any subcomponent) to find out what your biggest struggles are. We will use it in CSEG to inform how we can better engage with scientists who work on the code. Both to educate them on Research Software Engineering (RSE) methodologies to help improve and speed up in bringing in their science, as well as figuring out how we can work together to improve our science code in CESM making it:

- Easier to use
- More flexible
- More robust with changes
- More maintainable
- Verifiable
- Correct
- Reproducible

All of which are critical aspects of making CESM a finely tuned, precision scientific instrument to advance Earth System Science.

Because the science of CESM is expressed in software, in order to contribute to the science of CESM, some familiarity with Software languages and methodologies is required. There is no way around that. However, different science contributors have different levels of interest in learning about technical High Performance Computing (HPC) things as well as RSE methodologies. Some have minimal interest, others might want to divide their efforts between science and RSE activity. And some may even want to switch from science to RSE. Here we want to help you to do what you need to do based on your level of interest in learning more.

For any questions or comments please reach out to erik@ucar.edu