

CESM2 Tutorial (on AWS)

Brian Dobbins

Technology Development Division (TDD)

AGU 2018 Workshop

December 9th, 2018

(Very) Brief Technical Overview

- The Cloud is just a bunch of computers...
 - We installed CESM2 on it.
 - And made it function like a cluster.

Result: What you learn today applies anywhere!

Status: CESM2 on AWS (Current)

- Pre-installed environment
- Launching a cluster is a little complex
- Leaving nodes running gets to be expensive

In short, it works, and *come talk to us* if you want to use AWS for CESM2 research (today). Improvements are in the works...

Status: CESM2 on AWS (Soon)

- Pre-installed environment
- Python script launches cluster (easy!)
- Leaving nodes running gets to be expensive

This is in early testing now – it makes it a lot easier on end-users like yourself, but still has some gotchas!

Status: CESM2 on AWS (Future)

- Pre-installed environment
- Python script or portal launches environment
- Compute nodes allocated on-the-fly

This is in design, but a ways out – the big thing is idle compute nodes no longer exist. Less stress for students and PIs alike!

Tell us what *you* want!

- What would make your life easier?
- Science training?
- Technical training?

Thanks, and enjoy the tutorial!