LEAP TRAIN-THE-TRAINER BOOTCAMP ON CLIMATE DATA SCIENCE

Winter 2023

Date: January 5-6, 2023

Schedule: January 5th: 9am–5pm; January 6th: 9am–5pm

Venue: Smith Learning Theater at Teachers College, Columbia University

The Center for Learning the Earth with Artificial Intelligence and Physics (LEAP) at Columbia University is excited to announce its 2023 Train-the-Trainer Bootcamp on Climate Data Science. This two-day immersive, hands-on workshop is designed by LEAP researchers as part of LEAP's education programming to foster convergence of climate science and data science, vertically integrate research and education, and forge a LEAP research and learning community including K-12 teachers, LEAP doctoral students, postdocs, faculty, and other stakeholders. The bootcamp aims to teach Climate Data Science in the cloud using python tools with an emphasis on reproducibility and collaboration.

This bootcamp is open to:
- Faculty members and research scientists from LEAP institutions (Columbia, NYU, University of Minnesota, and University of California at Irvine)
- Postdocs and PhD students from LEAP institutions
- Research scientists from LEAP partner organizations
- NYC Department of Education high school teachers
- American Museum of Natural History

Learning Goals:
- Discover, access, and explore open-access climate datasets, including satellite observations and climate simulations, using the Xarray python package
- Calculate common climate statistics and diagnostics of variability and change using Xarray
- Perform interactive visualization of climate data using the Holoviews package
- Perform machine learning on spatio-temporal climate data
- Compare machine learning models' performance and prediction skill
- Perform open science in the cloud using the LEAP-Pangeo Jupyter Hub

The bootcamp will introduce climate data science to participants through a variety of activities including lectures, labs, and team hacking, which aim to prepare participants for machine learning-enabled climate research and more advanced and intensive research-oriented applications. Contact leap@columbia.edu with questions.

Seats are limited. Apply here.
The deadline for applications is December 21, 2022.