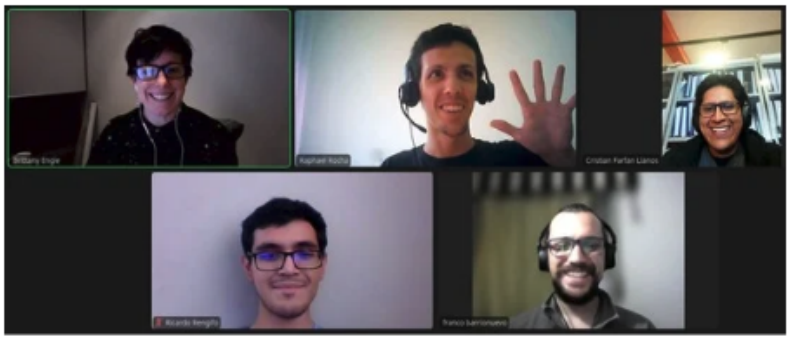
LEAP + Climatematch Academy: Supporting Climate Impact Scholars

June 19, 2024

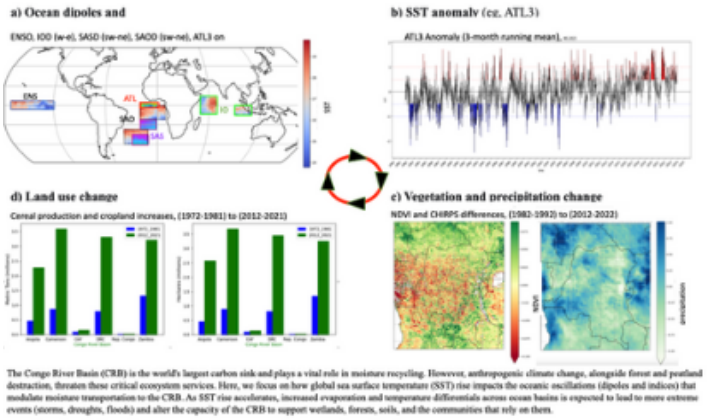
Learning the Earth with Artificial Intelligence & Physics (LEAP), a National Science Foundation (NSF)-funded Science & Technology Center based at Columbia University, is thrilled to announce an additional step in our partnership with Climatematch Academy, a global nonprofit on mission to expand equitable participation in scientific research. Climatematch Academy – a part of Neuromatch, Inc., an organization whose mission is to accelerate scientific innovation by facilitating inclusive, collaborative, and global participation in the computational sciences – represents a grassroots network of stakeholders around the world dedicated to creating a "globally diverse climate sciences community, trained on cutting-edge techniques to access and analyze open-source modeled and observational climate data."

Each summer, Climatematch hosts a global intensive online course, "Computational Tools for Climate Science," designed to provide educational and experiential foundations in computational climate science, accessing climate data sources, and hands-on climate modeling. Coursework converges with research projects and professional development opportunities, resulting in an ever-multiplying community of scientists and stakeholders whose goals are to strategically increase access to education, mentor, and equip to create meaningful change.

As part of this effort, LEAP is expanding its collaboration with Climatematch Academy to support Climatematch Impact Scholars Program (CISP) participants with LEAP Pangeo membership access so that interested students may build on their Academy learnings with a first research project experience. Current CISP



Team Tyrannosaurus Tango Dolce and their Mentor.
Topic of Study: Assessment of fire events in Argentinian Andean-Patagonian Forests between 2002-2020



Oceanic oscillations and Congo River Basin climatology. Team Fortepiano, Hesperosaurus_bon. (James Hartzell, Magda Altman, Rajiv Srivastava, Jeffrey N.A. Ayree, Pratik Bhandari, Lorenzo Pierini, Masoumeh Bahri, Mentor: Surajit Deb Barma)

research projects - representing 56 Impact Scholars from 25 nations - and their geographical regions of focus may be browsed here.

To date, seven (7) Climate Impact Scholars have signed up to the LEAP Pangeo JupyterHub, gaining access to compute and storage* that will enable them to take their programs to the next level, and continue their research toward outputs such as peer-reviewed publications, curated data sets, and published code. These research opportunities advance science by exploring new methods of building collaborative research teams, and serve as significant steps in career development. LEAP-supported projects include "Assessment of Fire Events in Argentinian Andean-Patagonian Forests Between 2002-2020," "Observing ECCO Model vs. Tidal Gauges Around Hurricane Maria," and "Oceanic Oscillations and Congo River Basin Climatology."

Learn more about Climatematch Academy.
Learn more about LEAP Pangeo.

* *Special thanks to Google for providing compute and storage resources.*