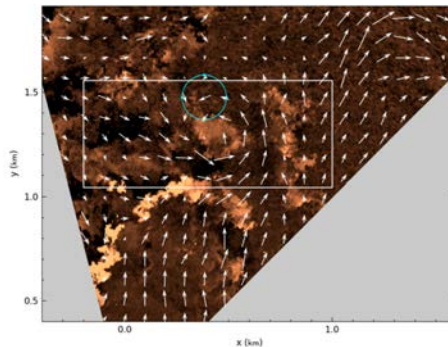


Graduate Research Assistantship at [California State University Chico](https://www.csuchico.edu/) Toward a Master of Science Degree



A continuing or new graduate student is needed at California State University Chico as soon as possible. The student could begin research immediately or over the summer and begin coursework in the Fall 2022 (August) semester. The student will work under the supervision of Dr. Shane Mayor on National Science Foundation (NSF) Award 2054969. The anticipated time required to complete the degree is 2 years. The MS degree could be in Environmental Science or customized in Interdisciplinary Studies.

The student will:

- Learn to use the *Typhoon* motion estimation software. ([Link](#), [Paper](#))
- Apply *Typhoon* to the Canopy Horizontal Array Turbulence Study (CHATS) data set. ([Link](#), [Link](#))
- Compare the results from *Typhoon* with CHATS sonic anemometer data.
- Compute multi-point statistics of atmospheric turbulence such as power spectra.
- Prepare for and participate in a field experiment in the summer of 2023.
- Work over summers is required.
- Write a master's thesis and a peer-reviewed journal article.
- Complete necessary coursework requirements and earn a master's degree.

Preferred:

- Interest in turbulence and atmospheric science.
- Ability to program in C/C++, Python, and use NVIDIA GPUs with CUDA.
- Ability to use workstations and servers running the Ubuntu operation system.
- Ability to create advanced data visualizations and maintain web pages.
- Organized and methodical approach to data processing and handling large data sets.
- Prior coursework in math, statistics, and physics.

Benefits:

- \$15.00/hr for a maximum of about \$17K/year.
- Full in-state tuition for 2 years. (Worth about \$10K/yr. Nonresident tuition waiver possible.)
- Laboratory in New Science Building.
- Experience conducting leading atmospheric research, including an exciting field experiment.
- A great steppingstone to a Ph.D. program elsewhere.

If interested, please contact Dr. Shane Mayor at sdmayor@csuchico.edu