



Funded MS/PhD Research Assistant Position

Applications are invited for a research assistant (RA) position (starting Fall 2024) in the Department of Geography at Oklahoma State University to work in the [HydRA](#) (Hydroclimate and EnviRonmental Adaptation) lab led by Dr. Saber E. Brasher. The candidate can also expect to work closely with Dr. Hamed Gholizadeh.

The overall goals of the project are to: (1) develop models for remote sensing of invasive plants in grassland ecosystems, (2) identify climatic controls and atmospheric situations conducive to invasive plants spread and establishment, and (3) identify habitats vulnerable to biological invasions under future climate scenarios using species distribution models (SDM). **This assistantship will be focused on the climatic elements of the project, which will involve compiling/ analyzing historical and projected climate data, synoptic methods in climatology, and incorporating down-scaled climate model output into SDMs.**

Students interested/ trained in topics such as Synoptic Climatology/ Meteorology, Atmospheric Dynamics, Hydroclimate, Climate Change, and Remote sensing are encouraged to apply. The position offers a stipend (for two years) and a tuition waiver. Additional support would be sought for interested PhD applicants.

Ideal candidates will have a background that includes:

- A BS or MS degree in Atmospheric Science or Environmental Science/ Physical Geography/ Remote Sensing/ an adjacent discipline (with coursework in climatology, meteorology, or hydrology, etc.)
- Proficiency in a scientific programming language (e.g., R, Python)
- Prior courses in math (statistics/ calculus) and/or physics
- Attention to detail in written/oral communications and data handling
- Strong work ethic, readiness to learn, and excitement to collaborate with others

A strong candidate does not have to contain all the above, but most. The student should be motivated to acquire whatever qualifications they may be missing during their time here.

About the Program: The student will be under the supervision of Dr. Saber E. Brasher in the Department of Geography, but they can apply to the graduate program in Environmental Science (ESGP) or Geography (GEOG). Which program is the best fit will depend on the student as they have different course requirements and prerequisites for entry. The student will be required to meet all the prerequisites for entry into either program. The student can expect to work closely both with Dr. Brasher's group of students as well as Dr. Gholizadeh's.

Application: Applicants should email Dr. Saber E. Brasher (saber.brasher@okstate.edu) a CV, unofficial transcripts, and a brief statement that discusses research ideas and future career goals. This statement/ initial email should also emphasize how the candidate meets the background criteria above. If the candidate is international, they should also report their TOEFL/ IELTS scores. Applications will be reviewed continuously as they arrive and a meeting (either in person or through zoom for non-local candidates) will be scheduled with well-matching candidates. Review of applications will continue until the position is filled.