

The Geomorphology Laboratory at the University of Texas Rio Grande Valley (UTRGV), led by Dr. Tian Y. Dong, is looking for a postdoctoral researcher to join us for Spring 2024 or Fall 2024 to work on a collaborative project funded by the U.S. Geological Survey.

What is the project about:

- Detecting geomorphic change in the lower Rio Grande Valley using airborne LiDAR datasets collected in 2011 and 2022
- Interpreting geomorphic changes to address applied questions about the US-Mexico border and the Rio Grande
- Using the high-resolution LiDAR dataset and numerical models to address broader questions in geomorphology and hydrology
- Performing fieldwork on the lower Rio Grande, taking advantage of the unique location of UTRGV directly adjacent to the banks of the river

Who are the team members:

- Dr. Tian Y. Dong, UTRGV, primary mentor and project PI
- Dr. Timothy Goudge, UT Austin, collaborator
- Dr. Joel Sankey and David Dean, USGS Grand Canyon Monitoring and Research Center in Flagstaff, AZ, collaborators

What do we offer:

- 2-year appointment with a starting salary of \$58,675, with a 3% annual raise, reaching \$62,248 for the
 last 8 months of the appointment, and full benefits, including health insurance and retirement plan
 contributions (The Rio Grande Valley enjoys a vigorous and growing economy with a high standard of
 living and one of the country's lowest living costs)
- Support to travel to UT Austin and the USGS office in Flagstaff, AZ, to work directly with project collaborators
- Support to attend AGU annually
- Support to purchase research equipment (e.g., laptop)
- Flexibility to work remotely if desired and if this fits with the final plan for postdoctoral research.

What skills are required for this position:

- A Ph.D. in Earth or Planetary Sciences or related disciplines at the time of appointment
- Experience in working with LiDAR change detection and -derived DEM.

What skills are desirable but not required for this position:

- Experience in using landscape evolution, flow routing, sediment transport, and hydrological models
- Drone survey and data processing experience
- Field experience in geomorphological and hydrological surveys
- Experience in mentoring undergraduate and graduate students

Interested candidates should send the following to tian.dong@utrgv.edu by December 1st:

- Academic CV
- A statement (max. 2 pages) about past research experience and interest in the project
- Names and emails of three references

School of Earth, Environmental, and Marine Sciences