



Graduate Research Assistantships

Water & Environmental Research Institute of the Western Pacific

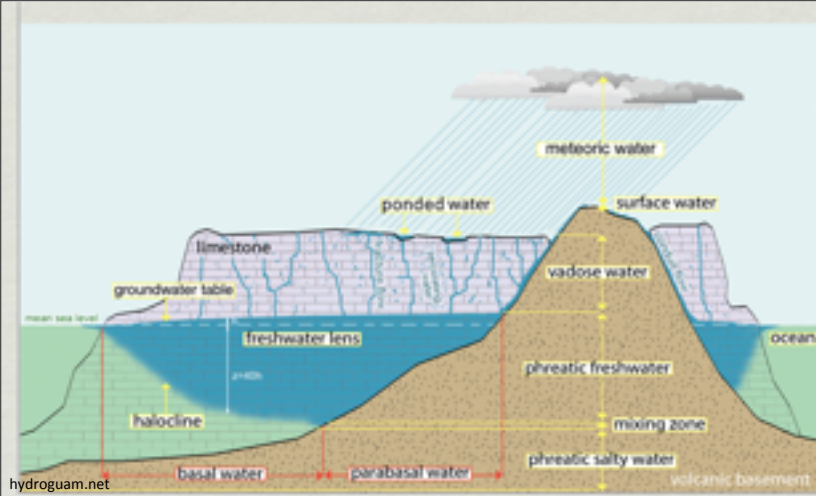
Applications of Unmanned Aerial Systems to Pacific Islands

Thermal sensing of freshwater discharge on the limestone coast of northern Guam

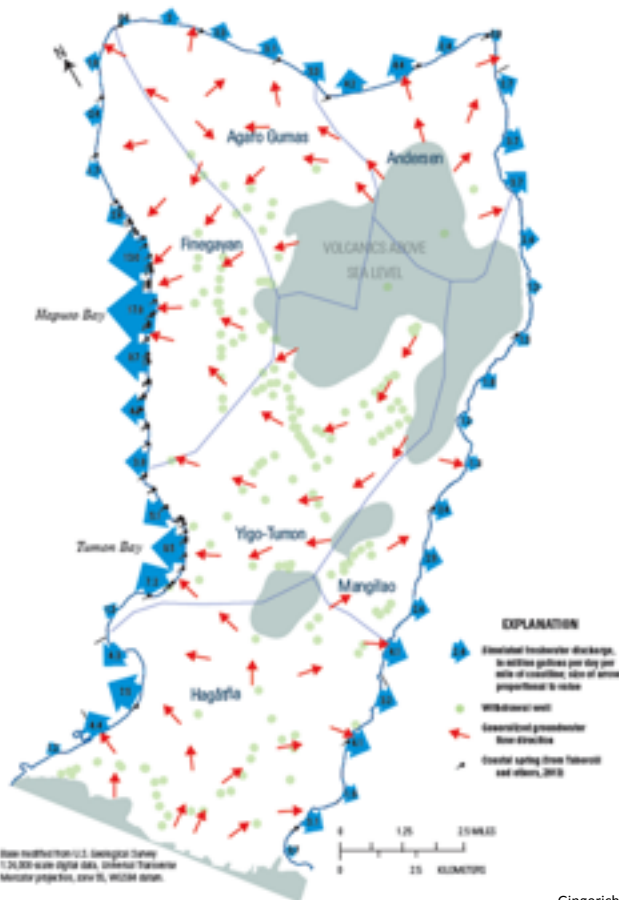


The University of Guam's [Water & Environmental Research Institute of the Western Pacific \(WERI\)](#) is offering two two-year [research assistantships](#) beginning August 2018 (fall semester, Fañuchånan) or January 2019 (spring semester, Fañomñakan) for research work that can be applied toward a Master of Science thesis in UOG's graduate Environmental Science program.

This project is funded by [NASA EPSCOR](#), and is collaborative with the [University of Hawaii's College of Engineering \(UHCOE\)](#). Researchers on Guam will use self-guiding unmanned aerial vehicles (UAVs) developed by UHCOE engineering faculty and students to collect, analyze, and interpret thermal imagery to locate and estimate freshwater discharge into coastal waters from the limestone aquifer of northern Guam.



hydroguam.net



Gingerich, 2013

Fieldwork will include locating, mapping, and measuring freshwater discharge from coastal caves, fractures, and submerged springs. Measurements will provide ground truth by which to calibrate remotely-sensed estimates of freshwater discharge from thermal imagery collected by UAVs. Graduate research assistants at the University of Guam will work with teams of UOG and UHCOE researchers to deploy and operate UAVs, collect field data in the coastal zone, and analyze and interpret remotely-sensed data in light of ground-based field data. Research assistantships will pay a salary plus tuition and fees for two years for work leading to a Master of Science degree in Environmental Science. The University of Guam is a US Land Grant University accredited by the Western Association of Schools and Colleges, and WERI is one of the nation's top-ranked [National Institutes for Water Resources Research](#).





If you would like to do cutting-edge research in remote-sensing, GIS, and/or coastal karst hydrogeology while earning an MSci. in Environmental Science and living and working on a tropical island in the western Pacific, we invite you to contact [Dr. John Jenson](#), Director, WERI, and/or [Dr. Romina King](#), Assistant Professor of Geography, University of Guam, to learn more about this superb opportunity. You may apply on-line through the [Research Corporation University of Guam-Job Announcements](#).

