# The connections Timmera made at DEVELOP have proved beneficial to her pursuit of a Ph.D. in Geosciences

Interview conducted and edited by Dashiell Cruz, NASA DEVELOP Impact Analysis Fellow

#### **Background**

Timmera Whaley is currently enrolled at Tuskegee University as a graduate student



Photo of Timmera Whaley

Supervised Classification with Landsat Bands (top) and Sentinel-2 Bands (bottom)

Giant Reed
Water
Bare Soil
Shrubland
Other Vegetation

while providing higher resolution data over larger areas.

pursuing her Masters of Science. This degree is under the Environmental Science program at Tuskegee and housed in the Geospatial and Climate Change center on campus. Her future plans include: conducting research for the U.S. Department of State Bureau of Educational and Cultural Affairs' Fulbright Scholarship grant to conduct research in Nigeria, pursuing a Ph.D. in Geosciences at the University of Arkansas, and reapplying for a NASA DEVELOP research position.

Timmera originally came on board with NASA DEVELOP during the summer 2016 term. She was a member of the Southwest U.S. Ecological Forecasting project conducted at Langley Research Center. This project's objective was to map invasive species to efficiently monitor areas in National Park Service (NPS) parks in New Mexico, Texas, and Utah.

Timmera played a key role in helping her team create land cover classification maps, a visualization distinguishing vegetation within the parks growing along the Rio Grande. This product is important because the NPS is responsible for seeking out cost-effective methods for maintaining the cultural, environmental, and recreational value of the lands they oversee. The team's classification map methodology provides the NPS with an additional tool to identify invasive species,

Random Forest classification of Landsat (top) and Sentinel-2 (bottom) around the Rio Grande

NASA DEVELOP's Impact Analysis Fellow, Dash Cruz, spoke virtually with Timmera about her recent experience with the program. Here are a few highlights from that conversation about her time at DEVELOP.

### Have you kept in contact with any DEVELOPers from your time with DEVELOP?

Yes, I have kept in touch with members of my team from my time at DEVELOP. These connections have benefitted my academic research during my graduate studies. One of my teammates, Katherine Landesman, has become an amazing friend, and we have been able to share geospatial techniques throughout the last year.

#### How will your experience at DEVELOP help benefit you in the future?

I was recently granted the 2017-2018 U.S. Fulbright Award to Nigeria, where I will conduct research on sea level rise and climate change at the University of Ibadan under the Department of Environmental Health Sciences. In the future, my goal is to pursue a career related to environmental science and emphasize on the use of geospatial techniques to highlight how these advancements can benefit the lives of others. I think DEVELOP has prepared me for a career in this rapidly-changing field by equipping me with the skills to conduct interdisciplinary research and write technically on these subject matters.

I am also a candidate for the University of Arkansas's Ph.D. program in Geosciences. During my time at DEVELOP, I made meaningful connections, such that I was comfortable asking my advisor for a letter of recommendation. Having this support increased my confidence in the application process.

## What advice would you give a DEVELOPer looking for opportunities post-DEVELOP?

Make genuine and honest connections with the people surrounding you while at DEVELOP. Not only are they a part of your new network, you might also be a great help to them one day in the future.

It is also important to place emphasis on the unique work that you have created at DEVELOP. From creating short videos to writing technical documents, make sure to let companies know that you left DEVELOP with a diverse skill-set. Study up on ways to communicate to a future employer how the deliverables that you worked on at DEVELOP can benefit their company.

You are armed with an array of skills and use them to your advantage!