

Nicholas Heath

Earth, Ocean & Atmospheric Science



Photos courtesy of Nicholas Heath

What turned into a full-blown research passion for surfer and student scientist Nick Heath started with a simple offhand comment.

In the summer of 2010, all eyes were on the Gulf of Mexico, where the Deepwater Horizon disaster had left a gusher of oil spewing freely into the ocean. Scientists were trying to find the best way to predict where the oil would go, and most were using models based primarily on wind.

One day, however, Associate Professor Mark Bourassa of the Department of Earth Ocean and Atmospheric Science mentioned another force of ocean movement, Stokes drift, which got Heath wondering whether he couldn't contribute something to the science of oil spill tracking himself.

"The idea was that the wind drift was very similar in magnitude and direction to Stokes drift," says Heath. "So the concept was to see how much impact Stokes drift had on the movement of oil at the surface."

Heath had an academic interest in the oil spill as a scientist, but the issue was also personal to him as an avid surfer.

"I do a lot of my surfing in the Gulf," he says, "so the oil spill was something that I was watching very closely."

His work on Stokes drift and oil slick movements landed Heath a spot at the Spring Undergraduate Research Symposium and then on to a second-place finish at the Northern Gulf Institute annual conference in Mobile, Ala.

After graduating in Spring 2011 with a major in meteorology and minors in math and physics, Heath moved on to graduate school but has stayed at FSU, where his love of scientific research first blossomed.

He has been studying air pollution over the Los Angeles basin, and even got the chance to fly aboard a NASA DC-8 to collect samples. His undergraduate experiences prepared him for the kind of integrated thinking such high-level research requires.

"I feel like completing an undergraduate honors thesis was the best thing that has ever happened to me," says Heath. "It taught me a lot of self-discipline. Also, I got to apply things I was learning in the classroom to a real-life situation. I remember learning things in class that I couldn't wait to apply to my research."

Avid surfer Nicholas Heath has a personal as well as academic interest in the health of the oceans. Heath (in headphones) collects air samples aboard a NASA DC-8.

