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UCI STUDENTS’ BLOG PREDICTS LOCAL WEATHER WHILE EDUCATING THE PUBLIC

By Ashly McGlone

Everyone knows that there’s more to rain than falling water.

Through a popular blog that has been gaining readership on a regular basis, two University of California, Irvine graduate students seek to do more than predict the weather locally; with Sprinklers or Not? They want to educate the county about the science behind weather patterns.

"We want our readers to learn more about what's going on outside, not just whether they should bring an umbrella to work," says Mike Tosca, Earth System Science doctoral student and blog co-creator.

Tosca, along with Scott Capps, who earned his doctorate from UCI last year, started the site in 2007 after noticing a lack of county-specific weather reports.

Citing local radio and TV forecasts, which tend to be L.A.-centered, as well as general Orange County weather releases by the National Weather Service’s San Diego office, the students saw a vital but untapped market and an opportunity for education.

"Focusing only on Orange County allows us to be more precise than weather agencies that forecast for much larger regions," says Tosca. "And people in Southern California don't seek to understand the science behind the weather. Our blog intends to change that mentality."

Tosca and Capps make their predictions using the same data used by the National Weather Service, including satellite images from the National Oceanic and Atmospheric Administration and computer model results, but they present the information in a more detailed fashion, says Tosca.

Tosca predicts when the next big weather event will occur, while Capps focuses on specific time factors and precise temperature predictions.

Blog topics include everything from the science of rain to the cause of temperature fluctuations to wind types (including the Santa Anas) – plus a look at weather anomalies.

Shortly after the site debuted, wildfires broke out across the county. The duo predicted which directions the smoke plumes would drift, and they saw blog readership soar from 125 hits a day to 700.

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Raised in Connecticut, Tosca graphed the
height of snow while other children played in it. California native Capps was fascinated by rain and clouds, and counted thermometers and wind-vanes among his toys.

Tosca, who studies the long-term, climate-changing effects of fire under UCI Earth System scientists Charles Zender and James Randerson, wants to help shape environmental policy in the future. Capps is currently a postdoctoral researcher at UCLA specializing in global wind and solar energy.