

## Student maps weather

*By Ryan Atkins*

After waking up to the annoying alarm clock, you get out of bed rubbing your eyes attempting to be alert. After showering, brushing your teeth and having that bowl of Lucky Charms to start the day off right, following a quick shot of orange juice you hurry outside, not wanting to be late, but before you're able to jump into your car and speed off to work you notice that the rain gauge is measuring at one inch.

Knowing there was no rain before you tucked yourself into bed, and no rain after you awoke, you come to the conclusion that the rain happened while you were sleeping. At this point you begin to think, "Why didn't anyone tell the public about the thunderstorm before we went to bed?"

SCSU Senior Matthew Dux is doing exactly that as an aspiring meteorologist working with the National Weather Service Forecast Office in Sioux Falls, S.D. (WFO FSD). Dux is analyzing data and creating detailed maps as part of a collaborative research project between the WFO FSD and SCSU professors in the Department of Earth and Atmospheric Sciences.

As Dux is only one semester away from graduation, it has come by no surprise to himself that he is working with science and is becoming very involved in weather.

"I was unique. I knew what I wanted to do as a kid," Dux said. "Through elementary school and junior high I followed weather and I always knew I would do something regarding math or science."

Dux was notified about the opening with WFO FSD by SCSU Professor Robert Weisman from the Department of Earth and Atmospheric Sciences. Dux, who has had three classes with Weisman, raved about the treatment Weisman gives his students.

"Dr Weisman will sit down with you (students) if you don't understand something," Dux said.

With his readiness and eagerness Dux will be performing many different studies to assist a team of researchers in identifying weather patterns that produce severe nighttime weather and exploring how the patterns are impacted by local topography.

Weisman, along with former SCSU students and WFO FSD staff, has done previous studies in an attempt to indicate that severe weather in SD often occurs during nighttime and early morning hours.

"It's difficult to accurately predict the location and severity of overnight thunderstorms," Weisman said. "Given this difficulty, severe weather watches-if issued at all-proved little time for individuals in the affected area to get safety."

Dux will assist in presenting of the findings he and his team members from WFO FSD will be discovering this summer at various conferences.

Dux is thrilled with the opportunity he has been given to work with professional meteorologists while he is still in school.

"Being able to work with highly regarded researchers allows me to use much of the training I've received at St. Cloud State, while proving that I'm worthy of being a member of the meteorological world," Dux said.

Funding for the research Dux will be doing has been provided by University Corporation for Atmospheric Research through a grant from the National Oceanic and Atmospheric Administration.

Weisman is very excited about the possible improved forecasting techniques that will transpire due to the research, enabling meteorologists throughout the Midwest to anticipate and warn for severe weather that