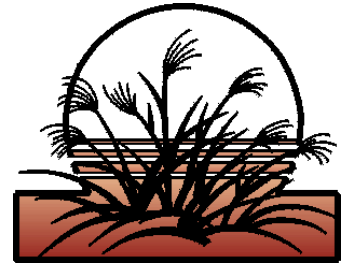




**NEWSLETTER
TWIN CITIES CHAPTER
AMERICAN METEOROLOGICAL
SOCIETY
March 2002 Vol. 23 No. 6**



The March meeting of the Twin Cities Chapter of the AMS will be at 7pm Thursday, March 21 at the University of St. Thomas in St. Paul. Specific directions to the meeting can be found on page 3. AMS chapter members, interested acquaintances and potential members are invited to attend.



***Guest speaker: Mike Fairbourne
"The history of television weathercasting"***

Our March meeting will have several components. We'll view a tape of TV weathercasts spanning several decades, which was shown at a national AMS broadcast meteorology conference a few years ago. That tape will be followed by a recent Dimension feature on 50 years of weathercasting at WCCO-TV. Mike Fairbourne, WCCO-TV meteorologist since 1977, will then share his observations about the evolution of weathercasts and will field questions from the audience. Meteorologist Ron Trenda, who occasionally anchors locally, will then lead an audience discussion concerning TV weather presentations; what is being done well, what aspects could be improved upon. It will be a great opportunity to share your observations and opinions. The 3M auditorium is a fine venue, please join us March 21 for a very interesting meeting.

Member of the month

Our featured chapter member this month is Greg Spoden. Greg is an Assistant State Climatologist in the Department of Natural Resources - State Climatology Office. The office is located on the St. Paul Campus of the U of M. Among its functions, the office archives and analyses Minnesota climate data. State, county, municipal and federal agencies often use this information in making policy decisions. The information is also used by private sector customers such as the media, engineers, architects, attorneys and the public. The office posts a wealth of Minnesota weather data and special climatological news releases at <http://climate.umn.edu/> Greg has been with the DNR since 1988. Prior to 1988, he worked as an agricultural meteorologist with the U of M Extension Service, and had a brief stint as a radio meteorologist with Hubbard Broadcasting. Greg attended the University of Wisconsin - Madison as an undergraduate, and the U of M - Twin Cities for his graduate studies. He grew up in Brooklyn Center and currently lives in Brooklyn Park with his wife and two daughters. Hopelessly outnumbered, Greg says he seldom wins family arguments but "enjoys being surrounded by beautiful women." Greg's interest in the weather can be traced to his grandfather (a Stearns county farmer) and his father (a long-time volunteer weather observer).

Chapter notes-by Ron Trenda

TV meteorologists are well aware that people have opinions on weather forecasts and coverage. You'll have an opportunity on March 21 to express your thoughts on the current state of TV weathercasting. We might decide to share our critique with local weathercasters. Join us at the March meeting for interesting videos and the lively discussion that is likely to follow. Our April 18 meeting will also be at the University of St. Thomas, and will feature a talk by Dr. George Sell of the U of M regarding new modeling techniques to forecast El Nino events. Additional details will arrive in the April newsletter. We now have 47 chapter members; thank you for your continued support. On another note...after 3 years as chapter newsletter editor, I will be handing these duties over to someone else next fall. Let me know if you're interested.

Comments from Chapter President

Dean Braatz

Congratulations to the following students receiving AMS Certificates at the South Central and South West Science Fair in Mankato, MN on Saturday March 2, 2002:

Chelsey Beranek , New Ulm Area Catholic Schools, New Ulm; Title: The Effect of the Four Seasons on the Acidity in the Water

Gunnar Wagoner, Glencoe-Silver Lake High School, Glencoe; Title: Which Fabrics Have The Best "Hypothermia Prevention" Properties?

Daniel Boogaard, Lynd Middle School, Lynd; Title: Hurricanes

Jacob Niemand, Montevideo High School, Montevideo; Title: STORM Observations With The Totable Tornado Observatory II

Twin Cities AMS Chapter members Craig Edwards, Doug Dokken and Dean Braatz volunteered as judges for special awards from the AMS and the U. S. Metric Association. Of the above students, Jacob Niemand had an outstanding project and he was selected to receive a year's subscription to

Weatherwise. The abstract below was prepared for his display at the Science Fair. It explains the complexity he had included in his project. A job well done Jacob!

Storm Observations With TObtable Tornado Observatory (TOTOII)

Jacob R. Niemand, Montevideo Senior High School, Montevideo, MN

TOTO (TObtable Tornado Observatory) II is a digital monitoring and recording device built to withstand extreme weather phenomena. It is a 35-gallon drum with a frame around it. The base is wider to withstand strong winds. The sides angle up to the smaller square. There is a pipe coming out of the drum with the Anemometer and Wind Vane sensors on it. The whole frame is welded together and painted bright orange. TOTO II is the second generation of TOTO built by Dr. Albert Bedard of the National Oceanic and Atmospheric Administration. It is improved by the wider framing, for greater stability and by the digital data recorder. Through the use of the Vierner LabPro and voltage, relative humidity, barometric and temperature sensors, as well as an inkless chart recorder, TOTO II is able to measure crucial meteorological data inside a storm. TOTO II would be loaded into a pick-up truck and driven to a storm system. Along the way TOTO II would be "setup" to record the meteorological data twice a second for 25 minutes with a laptop computer. When a drop-off location is determined, TOTO II would be quickly disconnected from the laptop and deployed. After the severe weather, the data from TOTO II can be downloaded from it back to the laptop and saved. The data collected will help engineers and architects design houses with a "tornado proof" closet or room for safety. The data will also help meteorologists get an idea of the complexity of a storm where Doppler Radar never records.

It is time to recruit chapter members to serve as new officers for 2002-2003. If you have a desire to serve the chapter next year as an officer, please let Dean Braatz know ASAP. Either call 952-925-9186 or e-mail at: dtbraatz@msn.com

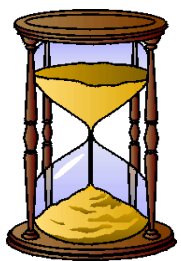
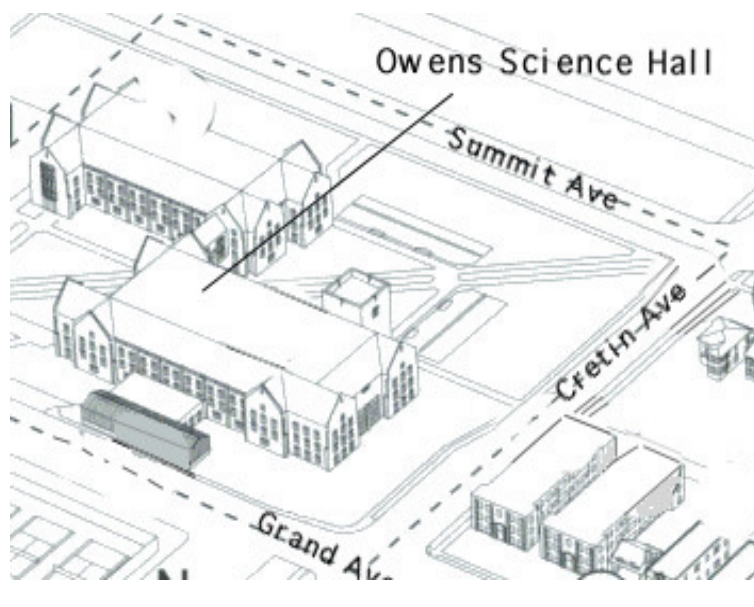
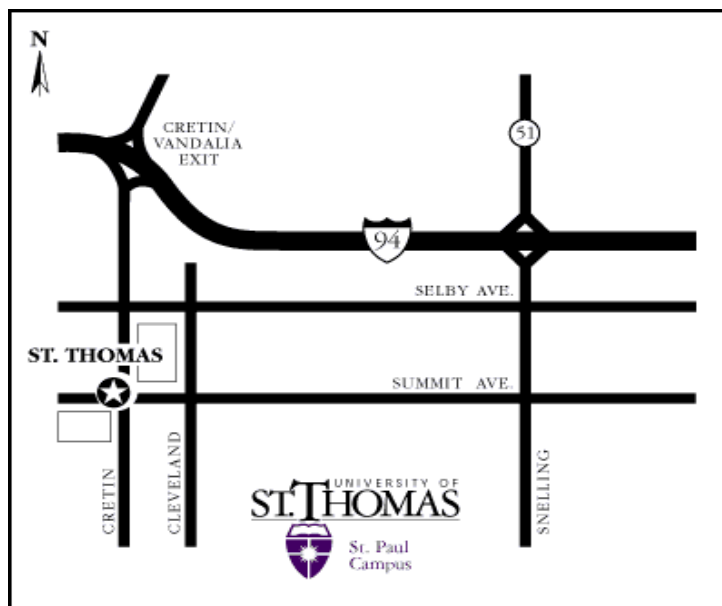


AMS on the WWW

Thanks again to Kurt Scholz and Doug Dokken of The University of St. Thomas for maintaining the web page for our local AMS chapter. Chapter information and links to climatological and meteorological information can be found there. E-mail Kurt or Doug with your comments about the web site. The web address for the Twin Cities is: http://byte.stthomas.edu/www/math_weather/tcametsoc.html

The March meeting will be held at 7pm, on Thursday, March 21 at the University of St. Thomas, St. Paul. The meeting will be held in the 3M auditorium (OWS150) in Owens Science Hall.

Directions: Take Interstate Highway **94** to the **Cretin** Avenue exit. Then go south on Cretin for about one mile to **Summit** Avenue. **Owens Science Hall** is located at the southwest corner of Summit and Cretin Avenues (see maps). You might find parking on the south side of Summit Avenue, or go to parking lot "N", which is south of the building. Either Kurt Scholz or Doug Dokken will be there to give you a parking pass. You can enter Owens Science Hall under the arches that connect the two science buildings or through the door at the southwest corner of the east wing.



Twin Cities Weather History- by Tom St. Martin

An intense spring storm cut a 150 mile swath through the Upper Midwest on 13-14 April 1928, bringing record or near record amounts of snow, disrupted traffic and unseasonably cold temperatures. Blizzard conditions were reported at Fairmont, Pipestone, Willmar, St. Cloud and Albert Lea. In St. Paul, the downtown Weather Bureau station recorded 13.3 inches from 13-15 April 1928. Locally, the storm started at daybreak on 13 April and by about 1300 hours, five inches of wet snow had fallen with a temperature of 23 F and "little wind". The 14 April 1928 St. Paul Dispatch reported that "shovel crews were digging into four foot drifts in the loop area" early on the morning of 14 April, a task which entailed "hacking. ...through an icy covering that froze over the snow when overnight temperatures dropped to the 18 degree mark. ..." The newspaper also reported that two feet of snow had fallen at Ladysmith, Wisconsin and that trains were running "up to 40 minutes late" as a result of the storm. In St. Paul, seven snowplows had opened all thoroughfares by noon on 14 April. Temperatures throughout Minnesota and the Dakotas dropped rapidly in the wake of the storm with a reading of -5 F reported at Watertown, South Dakota on the morning of 14 April. In St. Paul, the 13-14 April storm was preceded and followed by unseasonably cold temperatures. Daily maxima in the 30's F were recorded every day from 6-9 April, from 13-16 April and again from 18-20 April. The month as a whole was cold (with a monthly average temperature of 39 F). Surprisingly, the month's highest temperature (73 F) was recorded on 4 April. The 13-15 April snowfall was the second such event to affect east central Minnesota during April 1928. An earlier storm on 6 April (Good Friday) brought seven inches of snow to the area, an amount which, when combined with the fall from the second storm, set a St. Paul April snowfall record of 20.3 inches. And, although the Twin Cities area escaped with a "drizzling rain", heavy snowfall was reported in northern Minnesota on 11 April (including six inches of "heavy wet snow" at International Falls). Finally, another storm passed through the Dakotas and Minnesota on 18 April, producing cold rain in the southern part of the region (including St. Paul) and heavy snow in parts of the north (including five inches at Bemidji).