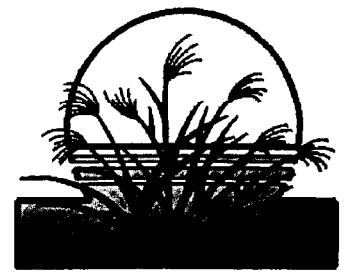




NEWSLETTER
TWIN CITIES CHAPTER
AMERICAN METEOROLOGICAL
SOCIETY

March, 2003 Vol. 24 No. 7



The March meeting of the Twin Cities Chapter of the AMS will be at 7 PM Thursday, March 20th, at the NWS, Chanhassen. Specific directions to the meeting can be found on page 3. AMS chapter members, interested acquaintances and potential members are invited to attend.



Featured Speaker: Seth Binau

"Case Study of the Ladysmith Tornado, September 2nd, 2002"

Seth will be present a meteorological review of the synoptic and mesoscale conditions that led to the development of the thunderstorms which produced the Ladysmith, Wisconsin Tornado last September. Through radar and higher resolution short term model and observational analysis, Seth will show how forecasters use several important near-storm environment parameters to diagnose the environment's potential to produce tornadic storms. The Ladysmith storm will be shown from several different radar sites, with emphasis on how different storms can appear from different radar locations.

Seth Binau is a forecaster with the NWS in Chanhassen. He is a 1999 graduate in meteorology from Iowa State University. He was born and raised in Upper Sandusky, OH. Seth began his career in the NWS as a meteorologist intern in Aberdeen, SD. He moved to the Twin Cities in the Fall of 2001.



Comments from our Chapter President Dean Braatz

Below are the monthly meeting dates for the local Twin Cities AMS Chapter's schedule during the Winter-Spring season of 2002-2003. Be sure you mark your calendar with these dates:

March 20, 2003 - Meeting at the NWS, Chanhassen, Seth Binau

April 17, 2003 - Meeting at SCSU, St. Cloud, Greg Nastrom

May 15, 2003 - Picnic in Chanhassen, Bruce Watson

John Miller, Doug Dokken and Dean Braatz served as judges at The South Central & Southwest Minnesota Regional Science & Engineering Fair on Saturday, February 22, 2003 in Mankato, MN. Approximately 450 students attended in both junior and senior high classifications. Those receiving AMS Certificates at the Mankato Science Fair were:

South Central

Junior High – Jocelyn Haroldson - Maple River West Middle School, Amboy, MN.

"Too Wet or Too Dry". The purpose of her experiment was to determine the effect of atmospheric moisture on the storage of seed corn.

Junior High – Michelle Langer – St Mary's School, Sleepy Eye, MN.

"Effect of Temperature Variations on Salt Crystals". The purpose of her experiment was to help guide scientists to grow crystals more efficiently.

Junior High – Eric Peterson – New Ulm Area Catholic Schools, New Ulm, MN.

"How Does The Type of Weather Affect The Amount of Radon in The Home". The purpose of his project was to find if the type of weather affects the amount of radon in each house. He focused on comparing wind speed and radon levels.

Southwest

Junior High – Carrilee Cluever – Benson High School, Benson, MN.

“*Does Air Temperature Affect Evaporation Rates*”. The purpose of her experiment was to study different temperatures and look at what effects those temperatures have on evaporation rates.

Junior High – Nick Dusek – Westbrook-Walnut Grove Middle School, Walnut Grove, MN,

“*Wind Generation*”. His project was an experiment to learn about wind generation and engineering. His idea was to find a style of wind turbine that would work effectively. His design was an eggbeater style and the blades were sail blades.

Thanks to all our chapter members who give up their time to serve as judges at the Science Fairs in Minnesota. Join us at our monthly meetings and keep our chapter active. Invite friends or colleagues that may have an interest in our science. We always welcome new members. If you have any ideas for topics in the fall please contact me. My email address is: dtbraatz1@msn.com

Looking forward to seeing many of you at our next meeting at the National Weather Service Offices in Chanhassen, MN. Forecaster Seth Binau will be presenting a case study on the Ladysmith, Wisconsin Tornado from last September. Seth made a presentation of the new generation software used to create warnings last year. His topic is very timely again this year as Spring approaches and severe weather season is just around the corner.

The officers for 2002-2003 are:

President – Dean Braatz

Sec-Treasurer – Joan Haley

Vice President – Doug Dokken

Newsletter – Kurt Scholz

Member of the Month – Chris Bovitz

Chris, who is the husband of Lori – last month’s member of the month, says: “from what I can remember, I’ve always been interested in weather. Although the weather on the Iron Range doesn’t get as wild as some places in Minnesota, it was enough to hold my interest. A simple indoor weather station from my parents really ramped up my interest in weather.”

After he got a degree in computer science at the University of Minnesota, he went to the University of Wisconsin-Madison in 1990 to earn a degree in atmospheric science. He took a variety of classes, did some teaching, some work in the state climatologist’s office, some research, and some real storm chasing (saw his first tornado!). At UW he met the person who would become his wife, Lori, who was a student in his first teaching class.

After completing his master’s degree in 1993, he was hired as a hydrologist at the NWS’s West Gulf River Forecast Center in Fort Worth, TX. Texas. His duties at the RFC spilled over into meteorology and other computer work like system administration and webmastering. In 1994 he and his (just married) wife, Lori, moved to Texas, and she was able to get into the NWS Forecast Office in town, and later came over to the RFC.

While in Fort Worth, Chris was a storm spotter for the local RACES group. He was also the local AMS chapter secretary one year and president for a few months before he and his family decided to leave Texas and return to Minnesota in late 2000. But he left with a profound appreciation for hydrology.

There weren’t any weather-related jobs for him here, but he found a job with a retail software company. The yearning to be around weather is still there, and it’s partially satisfied by being a Metro SKYWARN storm spotter as well as a member of the local AMS chapter. He hopes to be able again to practice meteorology professionally soon.



Editor's notes

What a difference a week makes. It's almost 60 degrees outside and I'm thinking about having a back-yard barbeque with my family. This month's meeting at NWS in Chanhassen features forecaster Seth Binau who, last May, gave us an interesting presentation of the Weather Event Simulator (WES) software which allows the NWS staff to use archived data and an AWIPS workstation to work severe weather events in real time. This time, Seth will present a case study of the F3 rated tornado which occurred in Ladysmith on Labor Day, September 2nd, 2002. http://www.crh.noaa.gov/mpx/ladysmith_tornado.html gives a detailed account of this tornado

The National Weather Service Alaska Region is seeking students to participate in The Student Temporary Experience Program (STEP). Positions are available at 3 Weather Service Forecast Offices - Fairbanks, Anchorage, and Juneau. In addition there is the Alaska/Pacific River Forecast Center, the Center Weather Service Unit, and the Alaska Aviation Weather Unit (all located in Anchorage).

The Student Career Education Program (STEP) position is a paid position for a term of up to one year, though it could be extended beyond that. While in this position, you can study in any area, and not be limited to meteorology, hydrology or computer/electronic systems (although one of these areas is preferred if the STEP position is eventually converted to a SCEP position).

This is a great opportunity for students seeking summer employment. Please distribute this information to those you feel may have interest in this program.

To apply or to learn more, please click on the link below.

<http://pafg.arh.noaa.gov/internstudent.shtml>

Reminder: The March meeting will be held at 7pm, on Thursday March 20th at the NWS, Chanhassen.

Directions

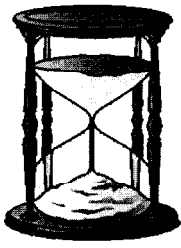
Take Highway **494** to the exit for Minnesota **Highway 5** west in Eden Prairie. Travel west on highway 5 into Chanhassen. Turn **left** (south) at **Audubon Road**. Follow Audubon Road to **Lake Drive**, then turn **right** and follow Lake Drive to the NWS entrance, which will be on your left. The Nexrad radar tower will be visible as you approach the area. An alternative, if traffic is heavy and you want to avoid the Audubon turn off of highway 5, is to turn **left** at the light onto **Powers Boulevard**, and head south. You would then take the **first right** off of Powers Boulevard, onto **Park Road**, and follow it to Audubon Road, then turn **left** and head south to Lake Drive.



AMS on the WWW

The address for the Twin Cities Chapter of the AMS is:

http://byte.stthomas.edu/www/math_http/weather/tcametsoc.html. Please send any comments, suggestions, changes of address, misspellings, etc. to Kurt Scholz, k9scholz@stthomas.edu.



Historical Twin Cities Weather - by Thomas St. Martin

During the week immediately preceding the 19-22 January cold wave, the Upper Midwest was struck by a severe blizzard (the worst, according to some reports, since the famous blizzard of 1873). The 13 January 1888 edition of the St. Paul Dispatch reported: "St. Paul Blockaded...snow depths of two feet on the level to five to fifteen feet in the cuts was sufficient to almost suspend the running of trains...no attempt to run any trains west of St. Paul...". The Twin Cities area, however, seems to have escaped the worst of the blizzard. According to the 13 January 1888 edition of the St. Paul Pioneer Press, the storm was centered over Ft. Buford, Dakota Territory on 11 January and was "between" Omaha and Yankton by 1500 hours on 12 January. The Dakotas and western Minnesota, accordingly, were hardest hit. Several hundred lives were lost, "snow clouds" were reported as "driven at the rate of 60 miles per hour", and large areas of the Upper Midwest were isolated for many days after the blizzard subsided. Many of the deaths occurred when farmers and travelers became lost in the blinding storm and were either frozen to death or suffocated by the snow. St. Paul newspapers carried numerous accounts of family tragedies, human suffering and near escapes. One account stated that the body of one of the victims, when discovered several days after the storm abated, had been partially eaten by wolves.

In St. Paul, the 13 January edition of the Pioneer Press reported that the snow, which fell "all day" on 12 January, was "piled into huge drifts". On the following day, the Pioneer Press reported that "although the cold was intense...the streets presented a lively appearance, for every available man was pressed into service on the street force and before night all of the streets in the business part of the city were cleared of the accumulation of snow...". Railroad traffic and business activity were reported as "practically at a standstill" during the storm; "tons and tons" of mail piled up at the local post office; St. Paul winter carnival officials were forced to postpone laying of the Ice Palace cornerstone; and falling temperatures on 15 January were exacerbated by a "sharp wind which prevailed all day." The Arctic air, which followed in the wake of the blizzard, brought near record low temperatures, including readings of -37 F at St. Paul and -43 F at Ft. Snelling, both on the morning of 15 January.

Twin Cities Chapter AMS
c/o Kurt Scholz
3233 Snelling Ave. North
Arden Hills MN 55112-3644

