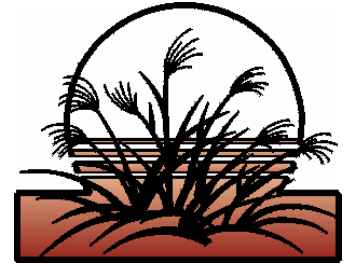




**NEWSLETTER  
TWIN CITIES CHAPTER  
AMERICAN METEOROLOGICAL  
SOCIETY  
September, 2006 Vol. 28 No. 1**



**This is a 6:00pm Dinner Meeting!! Speaker to follow at 7:30pm. Please contact Jonathan Cohen (phone and email in Editor's column) if you are coming to the dinner. You are welcome to attend only the talk at 7:30.**

**The September meeting of the Twin Cities Chapter of the AMS will take place on September 19 at the Cordon Bleu College of Culinary Arts in Mendota Heights. We will begin with a Dinner at 6:00, followed by the main speaker at 7:30. Map to the meeting can be found on page 6. AMS chapter members, interested acquaintances and potential members are invited to attend.**



*Featured Speaker: Patrick Hammer*

*Topic: West Coast forecasting*

Patrick is the Channel 5 EYEWITNESS NEWS morning and mid-day meteorologist. Before coming to the Twin Cities last year, Patrick worked in his hometown of San Francisco, California, at KTVU-TV as weekend meteorologist. Before that he held a variety of similar positions: two years as weekend meteorologist at KIRO-TV in Seattle, Washington, two and a half years as morning meteorologist at KRQE-TV in Albuquerque, New Mexico and four years four years as the chief meteorologist at KNVN-TV in Chico, California. Patrick holds a Bachelor of Science in Urban Planning from The University of Southern California. While at USC, Patrick worked as a teaching assistant in the university's Department of Geography. Patrick received a Certificate in Broadcast Meteorology from Mississippi State University. In 2003 he received an Emmy for continuing coverage of Rocky Mountain fires and drought conditions. Patrick enjoys chasing storms, fly-fishing, snow skiing, and listening to music by Steely Dan and Phish. He lives in the Twin Cities with his wife and two dogs.



*President's Corner: Chris Bovitz*

These are my first set of notes, and as such, I'll probably be awkward and incoherent, although hopefully a little less than usual.

First, thanks for trusting me with leading this chapter, or at least not opposing my rise to power too much.

As you're probably aware, our chapter is in the midst of a transition, an evolution to the next stage of our group. I think that we can really be a great chapter, and it could be something that we can all be proud to belong to. We're doing more things in the community, making more connections, and having more of a public presence. We're growing. Can ya feel it? But I and the other officers can't do it alone, and it won't happen overnight. It will take time, and it will take people.

I have some ideas where I think we could expand our sphere of influence and knowledge, and to become the group that people turn to. I would like to think that you, or most of you, share my enthusiasm. Well, I hope some of you do. But I think we can do it. No, that's not quite right: I know we can do it.

We all like meteorology and the related sciences. We either do it to make money or we do it because we love it. Sometimes, both are true. But whatever the reason, I think we're in this chapter because we enjoy the company of other professionals and hobbyists in meteorology. I know I do. A lot.

So, as they say, the pleasure isn't necessarily in the destination, but in the journey. I hope you will help me bring this chapter up to the level I know it's capable of. We have a lot of good people with good ideas. Let's make this journey together. What do you say? Wanna come with?

### *Changes and Kudos:*

Arden Berge, Meteorologist-in-Charge of the NWS Center Weather Service Unit in Farmington, MN, received the 2005 Minnesota Civil Servant of the Year Award. He was commended "for his leadership and fostering teamwork in 2005" by covering a staff member's operational shifts while that person was on extended leave, and continuing to perform his own administrative duties.

Kevin Huyck, on very short notice, took over as teacher for the Introduction to Meteorology course at St. Cloud Technical College. He is enlightening the minds of 22 students.

If you know of any other Twin Cities AMS members who have had recent successes or big changes in their professional lives, please drop an e-mail to me at [president@twincitiesams.org](mailto:president@twincitiesams.org) or to Kurt Scholz at [newsletter@twincitiesams.org](mailto:newsletter@twincitiesams.org).



### *Editor's notes - Kurt Scholz*

We're starting this fall season with a dinner meeting at 6 pm on September 19 at the Cordon Bleu College of Culinary Arts in Mendota Heights. The price for the four-course dinner (with approximately 3 choices for each course) is \$18. Coffee is included with dinner. A complete menu was not available at the time of this writing, but it will be posted on our new web site within a few days. The people at Cordon Bleu said it would make the dinner go faster if as many people as possible pre-selected order before coming. Please contact Jonathan Cohen as soon as possible via e-mail, [cohen004@umn.edu](mailto:cohen004@umn.edu), or telephone, 612-626-6520 (work) and 952-447-8434 (home) indicating that you are coming for dinner and, possibly, your order. Of course you're welcome to attend the talk without coming for the dinner.

You can submit your annual dues to our new secretary-treasurer Lori Bovitz at this meeting or next month's. You can also mail your annual dues to Lori at the address on page 7. Dues remain at \$20 for regular members and \$6 for student members. Be sure to fill out the member registration form on page 7 and submit your forecast contest entries by December 15. Winners will receive a \$20 gift certificate.

The NWS offices in Chanhassen will be holding an open house on Saturday, September 16, from 10 a.m. to 2 p.m. Our chapter will have a booth there where we can promote our club.

If you would like to help out staffing the booth, even if it's for an hour or two, please let Chris know. If you have any ideas for materials to hand out or items to bring to show off, let him know that, too!

Our web site is progressing very nicely - in fact, it's quite impressive, thanks to Chris and Lori Bovitz. Please check <http://www.twincitiesams.org> for latest, lots of interesting information, changes and updates.

We have some new e-mail addresses which you can use to contact us:

Chris Bovitz- president@twincitiesams.org  
Shelby Winiecki - vicepresident@twincitiesams.org  
Lori Bovitz - sectreas@twincitiesams.org  
Kurt Scholz - newsletter@twincitiesams.org  
Kevin Huyck - speakers@twincities.org

Next month, the 14th annual Kuehnast Lecture, sponsored by the U of M Department of Soil, Water and Climate, will take place on Wednesday, October 4 (3:30- 5:00 pm) in room 335 Borlaug Hall, St. Paul campus of the U of M. This year's speaker is Dr. Julie Winkler, Professor of Geography at Michigan State University. The talk, "*The Pileus Project: Climate Science in Support of Decision Making for an Intensively-Managed Agricultural Crop*", is concerned with "a multi-disciplinary effort investigating the potential impacts of climate variability and change on agriculture and tourism in the Great Lakes region". You can get a complete description of the talk at [http://climate.umn.edu/doc/journal/kuehnast\\_lecture/kuehnast.htm](http://climate.umn.edu/doc/journal/kuehnast_lecture/kuehnast.htm)

I am again running the "Member of the Month" feature to highlight one of our members each month.

### *Minutes of the May 2006 Meeting – compiled by Rich Naistat*

Following a barbecue in the backyard of the NWS office, those attending moved to the Chanhassen WFO conference room to attend to important agenda items.

The draft constitution was unanimously referred back to the committee. The committee was asked to create a bare-bones constitution, and a separate publication consisting of the by-laws. The revised documents are expected to be voted upon at the first meeting (September 2006), following their publication in the newsletter.

We spent time evaluating what we did over the past year, and how we could improve upon that in the coming year. These suggestions were adopted:

- 1) Meetings are to be held the 3rd Tuesday of each month September through May.
- 2) Most meetings will be held either at the University of St. Thomas or the NWS office in Chanhassen. This provides for geographic diversity and both facilities have great audio visual hookups as well as high-speed Internet connectivity.
- 3) The May meeting will be a planning meeting for the following year.
- 4) Tentative meetings and locations for the 2006-07 year:
  - A. September – Le Cordon Bleu (arranged by Jonathan Cohen). The speaker is expected to be KSTP meteorologist Patrick Hammer who will talk about his forecasting experience on the West Coast (Seattle and Sacramento).
  - B. October – Meteorlogix – hosted by Jim Foerster
  - C. November – WFO – storm-chaser presentation (it's their off-season).
  - D. December – tour of a Twin Cities media station.
  - E. January - Steak 'n' Ale in Bloomington – topic to be announced
  - F. February – open location and topic – location probably WFO or University of St. Thomas
  - G. March – hopefully leverage speaker from the Des Moines Severe Weather Conference – location probably WFO or University of St. Thomas
  - H. April – open
  - H. April – location and topic still to be determined
  - I. May – barbecue and planning meeting at the WFONOTE: one of the unscheduled meetings might be at the University of Minnesota- St. Paul. One of the speakers might be from the Climate Group.
- 5) The Speaker Committee's chair remains Kevin. Please send ALL suggestions to him at [speakers@twincitiesams.org](mailto:speakers@twincitiesams.org)

- 6) Shelby reviewed a 3-year plan for the Twin Cities AMS, and offered her view that we were very much on track. Nice job!
- 7) Other suggestions that the new officers should consider including
  - A. Developing an operating budget
  - B. Issuing press releases about meetings
  - C. following up on a member Anthony Stender's offer to write a column for each newsletter

We concluded our business by voting in a slate of officers for 2006-2007. They (and their e-mail addresses at [twincitiesams.org](http://twincitiesams.org)) are

- President – Chris Bovitz (president)
- Vice President – Shelby Winiecki (vice-president)
- Secretary/Treasurer – Lori Bovitz (sectreas)
- Newsletter editor – Kurt Scholz (newsletter)
- Chair of Speaker’s Committee – Kevin Huyck (speakers)

### *Upcoming AMS Chapter Meetings and Other Events*

Date & Time	Event	Location
<b>2006-2007 Chapter Year</b>		
September 16, 2006 10:00am to 2:00pm	NWS open house	<a href="#">Twin Cities WFO</a> Chanhassen, MN <a href="#">(map)</a>
September 19, 2006 Dinner 6:00pm Meeting 7:30pm	September meeting/dinner Speaker: ( <a href="#">KSTP</a> meteorologist) <a href="#">Patrick Hammer</a> Topic: West Coast forecasting	<a href="#">Le Cordon Bleu College of Culinary Arts</a> , Minnesota Room, 1440 Northland Dr, Mendota Heights, MN, 651-675-4770. <a href="#">(map)</a>
October 4, 2006 3:30 – 5:00 pm	<a href="#">The 13th Kuenast Lecture</a> , <a href="http://climate.umn.edu/doc/journal/kuehnast_lecture/">http://climate.umn.edu/doc/journal/kuehnast_lecture/</a> Speaker: <a href="#">Dr. Julie Winkler</a> Topic: <a href="#">The Pileus Project</a>	Room 335, Borlaug Hall <a href="#">University of Minnesota</a> St. Paul, MN <a href="#">(map)</a>
October 17, 2006 7:00pm	October meeting Speakers: Jim Foerster and Jim Block Tour of <a href="#">Meteorlogix</a>	<a href="#">Meteorlogix</a> Burnsville, MN <a href="#">(map)</a>
October 25-27, 2006	<a href="#">First Northern Plains Winter Weather Conference</a>	<a href="#">St. Cloud State University</a> St. Cloud, MN
November 21, 2006 7:00pm	November meeting Presentation by a storm chaser	<a href="#">Twin Cities WFO</a> Chanhassen, MN <a href="#">(map)</a>
December 12, 2006 7:00pm	December meeting Television studio tour	<a href="#">WCCO-TV Studio</a> Minneapolis, MN <a href="#">(map)</a>
January 16, 2007 7:00pm	January meeting - Topic: Analysis of a heat burst in western Minnesota Speaker: Karen Trammell, NWS meteorologist	<a href="#">St. Thomas University</a> St. Paul, MN
February 20, 2007	February meeting	University of Minnesota

7:00pm		St. Paul
March 20, 2007 7:00pm	March meeting - Speaker from the <a href="#">Des Moines Severe Weather Conference (tbd)</a>	<a href="#">St. Thomas University</a> St. Paul, MN
April 12, 2007	Tim Samaras and 3 others will be speaking Laura.Murphy@orpheum.com	Pantages Theatre, Minneapolis
April 17, 2007 7:00pm	April meeting	to be determined
May 15, 2007 7:00pm	May meeting - Picnic, recap of the year, elections, and planning for next year	<a href="#">Twin Cities WFO</a> Chanhassen, MN ( <a href="#">map</a> )



## *A Look at Weather History: Heat Waves of the Past Century.*

Anthony Stender

In upcoming issues of the Twin Cities AMS newsletter, I will be writing a segment that looks back at historical weather events. These articles will focus on a variety of interesting weather events that had a local, national, or global impact.

Not many Minnesotans complained about the heat during the relatively cool summer of 2004. However, when we were hit with nine straight days of 90-plus degree temperatures this past July (just like we had in July of 2005), complaints and air conditioner sales were on the rise. Whenever I heard one of these complaints, I was quick to reply that this was nothing compared to what I experienced in August and September of 2000 in Oklahoma. I moved to Norman in the midst of a 90 degree-plus heat wave that lasted 45 days. Of those days, the temperatures reached 100-plus degrees 24 times, including 17 days in a row. At one point, I remember Dr. Howie Bluestein telling the three of us in his Mesometeorology course that the weather was very disappointing to all of the new students who had dreams of chasing tornadoes in Oklahoma. What's interesting to note, however, is that even during Oklahoma's impressive heat wave, the departure from normal exceeded 10 degrees on only six of the 45 days. During our July heat wave, the departure from normal was over 10 degrees on five occasions, and the average departure was over 11 degrees above normal.

Another point to consider is how these recent heat waves compare to the most notable heat waves during the past century, notably from July of 1936 and July to August of 1988, which also happened to be significant drought years. Looking at records dating back to 1891, 1988 ranks as the fourth hottest and tenth driest year on record. During a nine-day stretch of 90-plus degrees that started on July 26<sup>th</sup>, the departure from normal was over 10 degrees six times, and the average departure for that period was 13.5. Yet, 1988 pales in comparison to 1936, the hottest and driest July in state history. After a cool 84-degree day on the fourth of July, the temperature rose to 90 on the fifth and 104 on the sixth. The temperature topped 100 degrees eight times over a fourteen-day stretch of 90-plus degree temperatures. On thirteen of the fourteen days, the average departure from normal was over 10 degrees, and it surpassed 20 degrees on six of the days, resulting in an average departure of 17.6 degrees over that span.

From an economic standpoint, the drought of 1988-89 has been called the most economically devastating natural disaster in US history. According to data from NCDC, the hot summer of 1988 resulted in 5 – 10,000 deaths nationally and \$40 billion in damages. In comparison, the heat wave of 2000 that affected the southern US caused an estimated \$4 billion and 140 deaths. Because of the economics of the 1930s, it is difficult to discern the actual dollar amount of damages from the 1936 drought. However, the 1930s saw four periods of drought, and according to the National Drought Mitigation Center, if you add the

losses together from all four of those droughts, the total amount in damages would be close to the value from the 1988 drought.

In retrospect, it makes one feel grateful that today we live in an era of air conditioning and a better economy than in the 1930s. Despite modern luxuries, exposure to excessive temperatures (hot or cold) typically results in more deaths in the US each year than any other weather-related phenomenon. Perhaps the most interesting statistic here is that summertime hot spells in Minnesota tend to be short-lived, but it isn't unusual for them to venture far from normal, that is, if there is such a thing as a normal summer temperature in Minnesota.

### ***Featured Member of the Month – Chris Bovitz***

Chris comes from a short line of meteorologists, with him being the first. His formative years were spent in and near the hamlet of Chisholm, Minnesota, on the Mesabi Iron Range as the eldest of 4 boys, where his nascent interest in weather was developed (and sometimes ridiculed). He attended the University of Minnesota and received a degree in computer science, then earned a master's degree in atmospheric science from the University of Wisconsin-Madison. While in graduate school, he met his current wife, Lori, while she was an undergraduate student.

After college, Chris worked as a hydrologist and river forecaster at the West Gulf River Forecast Center in Fort Worth, TX. He returned to Minnesota and took a non-weather job, but returned to meteorology to work with the NWS's National Operational Hydrologic Remote Sensing Center in Chanhassen. There he writes daily snow discussions, helps to support their real-time snow model, and some system administration, and other duties as assigned.

Chris currently lives in Lakeville with his wife and their two boys. For fun, he likes to in-line skate, bicycle, read books, spend time with his family, and yes, watch the weather, although not necessarily in that order and usually not all at once.

***Reminder: The September meeting will begin with a dinner at 6:00, followed by the main speaker at 7:30 pm. The meeting will be held on Tuesday, September 19 at Le Cordon Bleu College of Culinary Arts, 1440 Northland Dr, Mendota Heights, MN, 651-675-4700.***





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