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Center in cooperation with the American
Association of State Climatologists



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Annual Meeting of the American Association of State Climatologists

August 8-9, 1996, University of Wyoming, Laramie, WY

Thursday, August 8

After being welcomed to Wyoming by our host, Victor Hasfurther, President Myron Molnau (ID) gave the President's Address. Myron stated that the emphasis of this year's meeting would be on State Climatologist (SC) problems and issues. Issues of interest that arose during the last year were: the structure of the meeting (content and length); construction of an American Association of State Climatologists (AASC) web page; and the establishment of an AASC e-mail list serve. There were two prototype web pages for members to evaluate during the meeting-one at the National Climatic Data Center (NCDC) and another developed at Cornell (NY).

Challenges for the upcoming year were: dealing with changes in Federal programs that could impact the SCs; data overload (ASOS, NEXRAD, local networks, etc.); and dealing with increases in number of requests.

A panel discussion was held entitled "Health of State Programs" featuring Jim Zandlo

(MN), Tony Brazel (AZ) and David Robinson (NJ). To start the discussion, these SCs reported on the status of their programs. The Minnesota SC office is part of a state agency, although it is physically housed at a university. There are two full-time positions. They cannot charge for filling data requests and make a lot of their data available on the Internet (WWW). Requests are referred to the private sector, if appropriate.

The Arizona SC office is located at Arizona State University and the stability of the program is at the whim of the department chair. In addition to the SC, there is currently a half-time faculty position and a full-time secretary. They rely on the Western Regional Climate Center for information and also have good connections with their National Weather Service (NWS) offices. In New Jersey, the Office of the State Climatologist employs some part-time help. Income from processing requests is fed back into the program. They cooperate with the Northeast Regional Climate Center and receive requests referred to

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them by the Newark Airport. They deal with a large volume of media contacts. They wish to keep growing and are fostering contacts with state government agencies. The bulk of the discussion that followed these presentations revolved around the issue of charging for filling data requests. Some SCs use income from charging to hire part-time help. Others are not allowed by their sponsoring agency to charge. More and more data is being placed on the WWW to satisfy the needs of clients, thus reducing somewhat the number of requests. Requests for interpretation of the records are sent to the private sector by many SCs.

The annual NCDC Report was presented by Ken Hadeen, John Hughes and Grant Goodge. Highlights of Ken Hadeen's presentation on "What's New at

NCDC" included: NCDC is processing and archiving 1-minute ASOS data; automated quality control of the hourly precipitation data should lead to a more timely and higher quality publication; a new CD-ROM has been prepared that contains all the National Centers for Environmental Prediction (NCEP) fax charts for the past year; and a new US Climate Atlas, which will be available in hardcopy and on a CD-ROM, is being developed with the Oregon Climate Service. John Hughes presented NCDC's version of an AASC web page and discussed the history of the State Climatologist Exchange program. Grant Goodge discussed a number of quality control and data problems that NCDC is facing. Among these were delays in NCDC receiving the coop observers' forms because they are now going

through the local DAPM/HMT's, instead of directly to NCDC. He also shared his concern for missing data at first-order stations.

Five of the six regional climate centers (RCC) gave the group updates on their activities. Kelly Redmond (Western RCC) reported that they handle about 35-50 requests per day. Data is provided free of charge to SCs and the NWS. The NWS is the biggest user of their on-line system (WESCLIM), but the SCs also make considerable use of the system. Ken Hubbard (High Plains CC) gave a run-down of his center's current research projects. They field 150-200 requests per month and record about 5000 accesses per month on their on-line system. Warren Knapp (Northeast RCC) reported that the center had to eliminate some services that were previously free due to budget cuts. Research



Figure 1. A view of Wyoming.

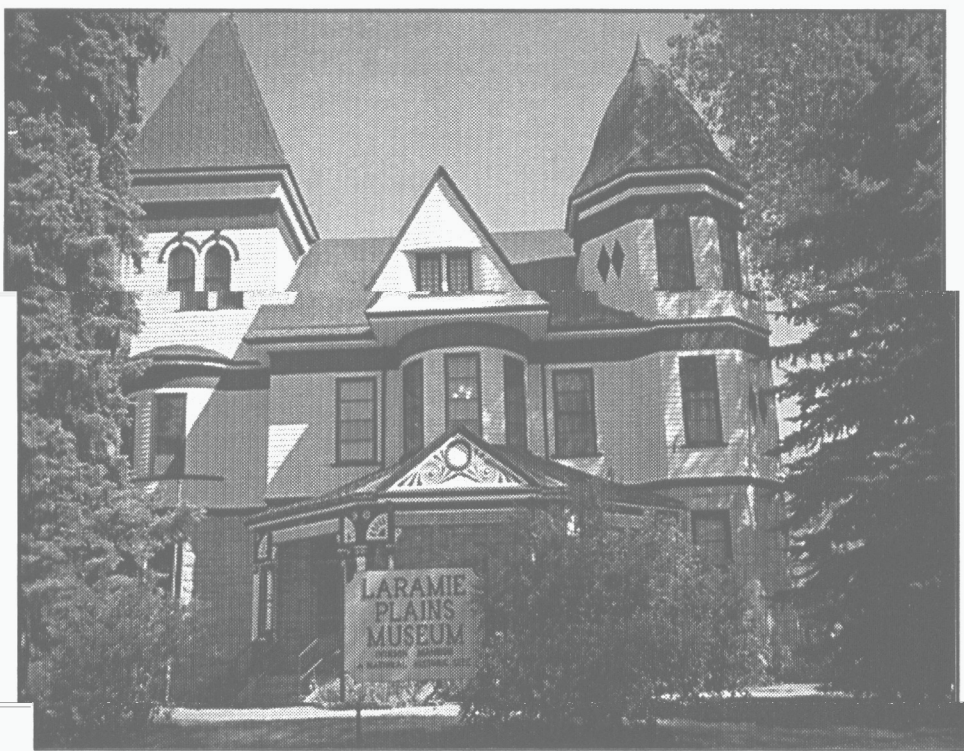


Figure 2. Wyoming's Laramie Plains Museum.

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projects include a wind climatology, development of a frost-depth model, and a revision of their solar radiation model made necessary by the installation of ASOS. Mike Helfert is the new director of the Southeast RCC (and South Carolina SC). He had only been on the job for 5 days, but took the opportunity to introduce himself to the group. Bob Muller (Southern RCC) indicated that they hope to redo TP-40 for the South in the fall. He also expressed his hope for the establishment of a national climate program.

Following lunch, our hosts, the Wyoming Water Resources Center, gave a presentation of their Water Resources Data System. The system serves as a

clearinghouse of hydrological and climatological data for the state. It is funded by the Wyoming Water Development Commission. This system is available on the WWW at http://www_wwrc.uwyo.edu/wrds/wrds.html.

The first state report was given by Jim Stimson (MT). Jim is the Water Information Coordinator for the Montana State Library. He has served as a contact point for sources of climate data since the climate center at Montana State University went away (with no prospects for a restart). The Montana Natural Resource Information System can be found on the web at <http://nr.is.mt.gov>.

Glen Conner (KY) related to the group his experiences at NCDC with the SC Exchange Program during his state report.

Bill Bonner of NCAR briefed the group on the activities of the NWS Modernization Committee of the National Research Council (National Academy of Sciences). The committee gives advice to the NWS on the scientific and technical aspects of modernization. The NWS has asked them to offer advice on the usefulness and direction of the cooperative observer program. They are interested in input from the AASC on this issue.

Andy Horvitz and Bob Leffler from the NWS Office of Meteorology addressed the problem of loss of snowfall and snow depth data at ASOS sites in a talk entitled "Near Real-Time Collection and Dissemination of Snow Observations." Some scenarios for rectifying this deficiency were discussed. One was to assign up to five coop observers per metro area to use touch-tone phones (ROSA system) to transfer their daily snow observations to the NWS. Thirty-year snowfall climatologies could be developed for these sites. AASC will be represented at a workshop to be held in September to work on this problem.

The day's sessions concluded with a panel discussion "NWS Modernization Issues Part 1: Coop Program Issues." Panelists

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were Tom Blackburn (NWS National Coop Program Manager), Grant Goodge (NCDC), Bob Leffler (NWS/OM) and Kelly Redmond (WRCC). Tom Blackburn discussed the transition from CPMs to DAPMs and possible lower cost alternatives to present coop observer equipment. For example, Nimbus temperature sensors with Gill shelters and 7 or 32 days of memory cost only about \$350.

Grant Goodge gave examples of the importance of cooperative observers' data and pointed out that first-order data is no better than coop data. He gave examples of problems with snowfall observations and indicated that with better training, a large number of the problems could be fixed before the data got to NCDC. Bob Leffler stated that there is no intent to replace cooperative observers with automation. Kelly Redmond talked about the importance of maintaining long-term coop stations and the need for uniformity in daily reporting by NWS offices. Kelly also pointed out the dual role of SCs as both "retailers" and "wholesalers/resellers" of coop data and that the estimated size of the user group should take that information into account (when modernization issues are discussed).

That evening the group attended a dinner theater at the Wyoming Territorial Park (note the picture on the front cover).

Friday, August 9

The AASC annual business meeting was held during breakfast.

Minutes of Business Meeting

The meeting was called to order at 7:30 am by Myron Molnau with 24 SCs in attendance and several associate and non-members.

The minutes of the 1995 meeting were approved as they appeared in "The State Climatologist." Keith Eggleston (NY) presented the Treasurer's Report. Account balances of the past two years have increased as follows:

Date	Checking	Savings
7/1/94	\$3860.33	\$10,161.10
7/1/95	\$4583.76	\$10,494.51
7/1/96	\$6659.96	\$10,867.70
8/6/96	\$6522.46	\$12,047.70

A report of dues payments for the last four years was also presented. In 1993-94, 67 people paid their dues; 1994-95, 91 paid; 1995-96, 65 paid; and 1996-97, 52 paid so far. A list of inactive Associate Members was presented. Eggleston reported that these members would be removed from the membership list if no objections were offered.

In response to questions raised last year, Eggleston reported the following from minutes of previous meetings: elected as Honorary Members were Helmut Landsberg (1984), Murray Mitchell (1985), Bill Bartlet (1985), and Harold Crutcher (1977). Previous winners of the Helmut Landsberg Award were

Harold Crutcher (1977) and Thomas Karl (1993). The entire report was approved.

The Executive Committee report followed. An AASC logo appears on the NCDC version of the AASC home page. This will be used on the stationary during the coming year. Two versions of AASC home pages are accessible. Members noted that the constitution and meeting minutes should be added.

Another suggestion was that Nolan Doesken could provide a coop program summary. AASC needs to monitor and make sure we are represented in the deliberations of the coop program modernization committee (as reported on by Bill Bonner Thursday). Myron and Pam Knox will contact Bob Serafin (committee chair) if this study moves forward. There was discussion from Thursday's report that coop observer forms are arriving late at NCDC. SCs should stress the importance of these forms being sent out in a timely manner (by the 15th) in discussions with DAPMs. It was concluded that electronic balloting can be used if the need arises. Adequate time for discussion should be allowed before voting takes place.

There was no old business. Under new business, Ray Motha, Matt Menne, Mark Seeley and Jim Stimson were nominated and unanimously approved as Associate Members.

The next item of new business was disposition of AASC funds. It was noted that Grant Goodge's travel to

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this year's meeting was covered by AASC. It was suggested that AASC could pay for travel of first-time attendees (SCs). The consensus of the group was that this was acceptable and the details were left to the executive committee to work out. Another suggestion was that an AASC brochure outlining the function of the association could be developed. A committee composed of Wayne Wendland (IL), Hal Kleforth (NV) and Jim Zandlo (MN) was appointed to work on this. Other projects mentioned were: an award for contributions to climate observing and paying to print the results of Paul Waite's AASC history.

The Nominating Committee nominated Alan Dutcher (NE) for President-Elect and Mary Knapp (KS) for Secretary - Treasurer. A motion was made that nominations be closed and the secretary cast a unanimous ballot for this slate - the motion passed unanimously. Those assembled voted for Flagstaff or Prescott, AZ as the location for next year's meeting. Tony and Sandra Brazel will do the arrangements.

A discussion of future directions for these meetings ensued. Several opinions were expressed. Many expressed interest in having more technical talks. The 5-10 minute state reports should be left in and should provide more depth on new products and services or new research. Handouts and preprints should also accompany these reports. To have adequate time to do all this, it might be necessary to

1996 - A Year of Heavy Rainfall

The NOAA NESDIS National Climatic Data Center's annual data indicate that an abundant amount of moisture moving north from the Gulf of Mexico helped the Northeastern part of the nation have an all-time wettest year.

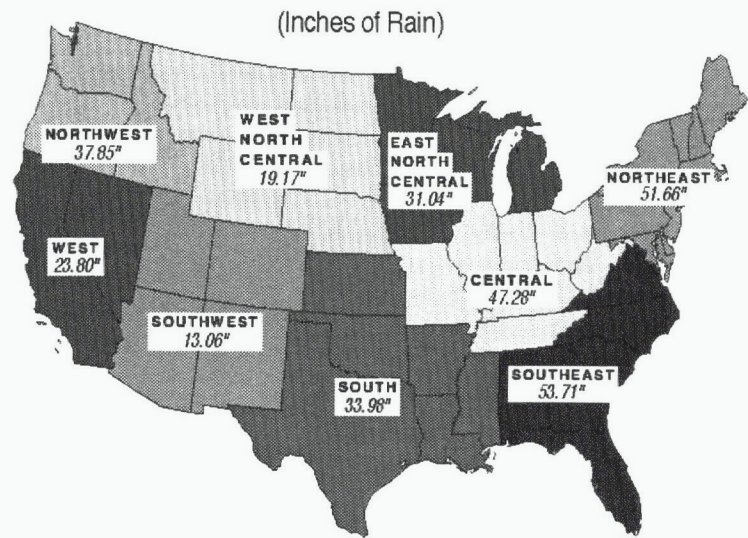
The Northeast received 51.66 inches of rain and snow water equivalent precipitation during 1996. The Pacific Northwest was also pounded with abundant North Pacific ocean storms that helped set a new record of 37.85 inches. Details on this are outlined in our technical report entitled "The Winter of '96-'97 West Coast Flooding." Also in the West, the states of Oregon and Idaho set all time precipitation records; while

Pennsylvania and West Virginia also recorded the most rain and snow in a single year. New York state had the second wettest year on record.

For the nation as a whole, 1996 averaged 32.32 inches of precipitation making the year the fifth wettest since national records began back in 1895.

The national average temperature last year was 52.3 degrees Fahrenheit, close to the normal of 52.4. Of the 102 years of record keeping, 1996 ranks 47th on a scale where 1 is the coldest and 102 is the hottest.

U.S. TEMPERATURE AND PRECIPITATION REGIONS



National Climatic Data Center, NOAA

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expand the meeting to three days.

It was suggested that next year's meeting focus on extreme precipitation, estimation of missing data, and/or spatial analysis.

The business meeting was adjourned at 9:08.

The day's talks got underway with a panel discussion on "NWS Modernization Issues Part 2: ASOS" with panelists Vickie Nadolski (ASOS Program Manager) and Tom McKee (CO). Ms. Nodolski provided an overview of ASOS. She also discussed the various sensors that make up the system, early problems that have been addressed and plans for future improvements.

Tom McKee reported that a continuity study is starting for the new tipping-bucket rain gauge. He said he found no systematic bias in dewpoint, but jet fuel on the mirror might be the cause of some erroneous values. A new version of the ASOS temperature sensor features better aspiration and better quality electronics. There was no bias found in the ASOS sensor, but there is a warm bias in the HO-83. In addition, small instrument moves can have big effects on temperatures.

Lt. Col. Judd Stailey gave a report for the Office of Federal Coordinator for Meteorology (OFCM). He gave a summary of the work they do. The office is an interagency group funded by the

Departments of Commerce, Transportation and Defense. He is on a working group looking at federal climate services. He indicated that unfortunately in the government, non-climatologists regard "climate services" as climate change and not applied climatology.

Steven Hu (MO) gave the morning's first state report. He said that the Missouri SC program has been historically ag-focused. The office receives some ag experiment station money, but the rest of the funding is soft money, thus research is a high priority.

Dwight Pollard (AK) is working on a Fire Weather Program to let outside agencies know about what the group does.

Matt Menne gave a Wisconsin report. Pam Knox is moving to NY for a year and Matt will be covering the office for her. He also talked about work on the Wisconsin Wind Atlas.

Fred Nurnberger (MI) showed how he uses the program Surfer to do data quality checks. He displayed some sample maps that he produced.

Gerd Wendler from the Alaska Climate Research Center in Fairbanks directed us to his home page http://climate.gi.alaska.edu/AK_climate.html.

The meeting adjourned with thanks to our hosts, Vic Hasfurther and his staff.

Submitted by
Keith L. Eggleston

U.S. DEPARTMENT OF COMMERCE

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