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The State Climatologist

NATIONAL CLIMATIC DATA CENTER OFFERS RESEARCHERS "ONE-STOP" CUSTOMER SERVICE

Contents

Dr. Kenneth D. Hadeen Director, NCDC

Dr. Mark D. Shulman President, AASC

Steve Doty Editor, The State Climatologist

The National Climatic Data Center (NCDC), Asheville, N.C., now provides "one stop" assistance to the global climate change and scientific research community through a newly created Research Customer Service Group (RCSG).

The RCSG was organized to give researchers a single point-of-contact for accessing NCDC's national and international climatic data bases. NCDC is the collection point for all U.S. weather records and is the world's largest climate data center.

"Whether you're hot or cold in climate change, or a scientific researcher looking for specific climate data elements, NCDC's Research Customer Service Group can help," says Tom Ross, RCSG meteorologist. The research-oriented professional meteorologists who staff the servicing group are experts in NCDC's wide range of climatic data set availability, analysis, and applicability of data to particular research projects and data set limitations, he notes.

New technology and means of assimilating data are also aggressively pursued at NCDC. The first troika CD-ROM was produced at NCDC in the fall of 1990. It was a joint effort involving the U.S. Navy, U.S. Air Force, and NCDC representing the Department of Commerce. This CD presents the International Station Meteorological Climate Summary (ISMCS) for world-wide Navy stations, selected Air Force and NWS stations. The interactive graphic displays for pinpointing locations along with long term meteorological summaries for over 6000 stations is an impressive addition to global climatology. NCDC is also producing additional CD-ROM's dealing with the Historical Climatology Series and Pilot Chart sums of Global Marine data.

These are just a few of the new and exciting projects under development at NCDC. Updated validation techniques and quality control of incoming data is still a priority in building a reliable climatological data base to help study global climatic change and other meteorological phenomenon.

The Research Customer Servicing Group may be contacted by

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NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER IN COOPERATION WITH
AMERICAN ASSOCIATION OF STATE CLIMATOLOGISTS

telephone, facsimile, or by writing NOAA, National Climatic Data Center, Research Customer Service Group, Federal Building-Room 121, Asheville, N.C. 28801.

Telephone	Commercial
(704) 259-0994	FTS 672-0994
Fax	Commercial
(704) 259-0876	FTS 672-0876

A WORD FROM THE AASC PRESIDENT

While climatologists have long been convinced of the importance of their discipline, this reality is now being increasingly accepted by others. Concerns regarding our atmospheric environment and its anthropogenic alteration are common topics. Climatologists as keepers of the record and its integrity, have the dual responsibility of being climatically knowledgeable and knowing the limitations of the science. The American Association of State Climatologists can assist all climatologists in fulfilling these obligations by serving as a focus and conduit for climatic policy, information, and exchange. Several American Association of State Climatologists committees are working on current climate issues which require the input of your opinions and ideas.

"Climatologists... have the dual responsibility of being climatically knowledgeable and knowing the limitations of the science."

Committee on Cooperative Network Modernization

The Cooperative Network Modernization Committee will study problems associated with network modernization, including the possible loss of some existing observations and a review of non-National Weather Service databases and observations systems.

Kelly Redmond (Co-Chair)
Western Regional Climate Center
Desert Research Institute
P. O. Box 60220
Reno, Nevada 89506

Dave Robinson (Co-Chair)
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Rutgers University, Lucy Stone Hall
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Bob Muller
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Baton Rouge, LA 70803

Mary Knapp
516 Bertrand
Manhattan, KS 66502

Instrumentation Committee

The charge to the Instrumentation Committee, included for purposes of climatology, a review of instrumentation type, quality, siting, and parameters measured.

Nolan Doesken (Chair)
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These committees will report to the American Associate of State Climatologists during the Annual Meeting. This year's meeting will be held on August 7-9, 1991 in Anchorage, Alaska. Ken Kunkel, President-elect of the American Association of State Climatologists, and Jim Wise, State Climatologist for Alaska, are in charge of the program and local arrangements. If you have suggestions regarding speakers, topics and the like, please contact Ken Kunkel at the Midwestern Climate Center, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820. Jim is planning interesting side trips and social events that should make these meetings memorable. This year's nominations committee is chaired by Wayne Wendland, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820, and include Warren Knapp of the Northeast Regional Climate Center and Glen Connor of Western Kentucky University. Their recommendations for next year's officers will be made at the Annual Meetings, and I'm sure Wayne would appreciate your suggestions on possible candidates. I hope you will be able to join us at the annual meetings.

"The 1991 meeting of the AASC will be in Anchorage..."

"Along the way there are opportunities for watching whales, visiting a bird sanctuary....and salmon spawning...."

It is my intention to give a progress report on the deliberations of the American Association of State Climatologists committees and to include an updated membership list in a mailing to all members as soon as possible. I'd welcome your comments and can be reached at (908) 932-9387/9520.

Dr. Mark D. Shulman, President
American Association of State Climatologists
State Climatologist, New Jersey
Chairman & Professor, Dept. of Meteorology and Physical Oceanography, Cook College-Rutgers University

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AASC ANNUAL MEETING ANNOUNCEMENT

The 1991 meeting of AASC will be in Anchorage at the University of Alaska Anchorage (UAA) campus on Wednesday, Thursday, and Friday, August 7, 8, and 9. Registration can be done either Tuesday upon arrival or Wednesday morning. Campus housing is more suitable for individuals than for couples and is by far the least expensive ($20 to $35 per person per night depending on the level of linen and cleaning services). Families and couples may be more interested in bed and breakfast accommodations or in local hotels. The nearest hotel to the UAA campus is the Golden Lion Hotel (telephone number 907-561-1522) where room rates range from $102.60 for a single, $109 for a double, to $75.60 for a single/double for university and government employees.

Sessions will start in midmorning on August 7 and run to midafternoon when an educational field trip is planned to Portage Glacier which is about 40 miles southwest of Anchorage. Along the way there are opportunities for watching whales, visiting a bird sanctuary, viewing Dall's sheep in the mountains, visiting Alyeska Ski Resort, and looking at avalanche paths and avalanche control facilities, salmon spawning, and

damage from the 1964 earthquake.

At Portage Glacier, tour participants will be given a special presentation by a National Park Service ranger. There also will be a boat ride across Portage Lake to the terminus of Portage Glacier. The day will end with a catered icebreaker featuring hearty hors d'oeuvres and refreshments at the Portage Glacier Lodge followed by a return bus ride to the UAA campus. If the timing is right, participants may see a boar tide roaring up Turnagain Arm during their bus ride. We expect to arrive in Anchorage by 9 p.m., still in broad daylight. Sunset is at 10:22 p.m. On August 8, there will be sessions all day with a banquet at O'Malley on the Green, a golf clubhouse in the foothills of the Chugach Mountains. The clubhouse is about 10 miles from UAA. If anyone is interested, we may try for a round of golf either on Tuesday or Saturday at one of the four courses in the Anchorage area. On Friday, August 9, sessions will be limited to the morning with an optional afternoon educational field trip to the terminus of the Matanuska Glacier. Located about 110 miles northeast of Anchorage, the Matanuska Glacier terminates on land and its meltwater feeds the Matanuska River. En route, there are opportunities to see wildlife, evidence of earthquake damage, Alaska agriculture, and the spectacular Matanuska River gorge.

"...participants may see a boar tide..."

"We hope to see many of you in Alaska this summer..."

The registration fee has been tentatively set at $217 and includes costs for breakfasts (August 8 and 9), lunches (August 7 and 8), an educational field trip (August 7), and a banquet. Spouse or dependent costs are: Wednesday afternoon field trip (includes reception) is $65; banquet tickets are $35; extra meal tickets (breakfasts and lunches) are $35; and the Matanuska Valley tour is $30 exclusive of meals. We are also planning an optional spouse tour on Thursday with a cost estimated at $30, not including lunch.

"...the Center is now staffing up in order to meet the challenges..."

During the summer in Anchorage, most hotels fill early so it is best to get reservations well in advance. If you are planning on staying in campus housing, the sooner you arrange for accommodations the better. Costs quoted are tentative based on preliminary estimates of 50 meeting registrants plus 25 spouses or dependents. Bus tours are for a minimum of 30.

We hope to see many of you in Alaska this summer and I promise to do all I can to get good weather for all outdoor events.

James L. Wise
Alaska State Climatologist

NOTE: Ken Kunkel has been checking on air fares to Anchorage. Super Saver, non-refundable fares appear to be between $690-$770 no matter where you depart from in the "lower 48" states. If anyone finds a better deal, please let Ken know (217-244-1488).

STAFF CHANGES AT THE NATIONAL CLIMATIC DATA CENTER

The National Climatic Data Center has been the scene of many staff changes in the last few months and more are on the way. After a long drought in hiring, the Center is now staffing up in order to meet the challenges that the new awareness of climate has brought to the world. Over 20 new faces are now evident at the Center. Dr. David Easterling has joined NCDC's Global Climate Lab after a stay at the University of Indiana. Dr. Bert Eskridge, also

with the Global Climate Lab, joins NCDC after several years with the EPA in Research Triangle Park, NC. Both David and Bert will be project leaders in the development of global baseline data sets. Art Polansky has recently joined the team as a programmer, having moved down from NESDIS Satellite Research in Washington, DC.

Wayne Faas, most recently the Commander of the Air Force's Global Climatology Division in Asheville, has joined the Systems Development Staff. His current interest is the Wind Profiler Demonstration Network and the STORM project. Mike Crowe, of the Systems Development Staff, has taken an assignment with the World Meteorological Organization and the World Climate Program. Mike and his family have recently moved to Geneva, Switzerland.

"Ken Hubbard has relinquished the Nebraska SC position..."

Internally, several staff changes have also been taking place. Andy Goss is now the new CLICOM focal point assigned to the Climate Analysis Branch. This Branch, which houses the Research Customer Service Group (see article on page 1), is now under the direction of Marc Plantico. The Data Base Management Branch is now being led by Pete Steurer. Both Marc and Pete come from NCDC's Global Climate Lab.

And last, but not least in my book, I have joined the Systems Development Staff as the Chief of the Advanced Projects Group. After eight years of working directly with the State Climatologists, I will certainly miss the interactions we've had on a daily basis. A new Projects Coordinator has not yet been named.

"A few of the many products offered free of charge include irrigation scheduling files, selected hourly and daily... measurements and National Weather Service products."

Steve Doty
National Climatic Data Center

NEW STATE CLIMATOLOGIST FOR NEBRASKA

Dr. Ken Hubbard has relinquished the Nebraska SC position to concentrate his efforts toward the High Plains Climate Center directorship, research interests, and teaching priorities. The large operational demand of the HPCC automated weather data network (AWDN), speaking and teaching engagements, and participation on the faculty search committee for a new Agricultural Meteorologist were cited as several factors limiting the development of the Nebraska SC program.

My background includes undertaking a pre-Engineering degree at Alpena Community College, Alpena, Michigan. In 1983, I transferred to Iowa State University to pursue a bachelor degree in meteorology. Upon completion in 1985, I began graduate school in Agricultural Meteorology under the direction of Dr. Richard Carlson. During the next four years, time was split between a teaching assistantship in Introductory Meteorology and concentrating on my thesis titled, "The annual and intra-annual variability of time of observation bias applied to air temperatures in Iowa."

I began work at the High Plains Climate Center (HPCC) as a climate specialist on June 5, 1989. My work has concentrated on developing AWDN data bases which can be included on the HPCC Remote Bulletin Board Service (RBBS). A few of the many products offered free of charge include irrigation scheduling files, selected hourly and daily AWDN meteorological variable measurements, and National Weather Service products. The RBBS has a user base of over 300 people, with approximately 50 being daily users. Some of my other responsibilities

included modeling weather effects on soil moisture under a variety of crops throughout the HPCC region, drought studies for the Department of Agriculture and the International Drought Information Center, and answering user specific data requests. The Nebraska state climatologist program envisions several projects to be completed within the upcoming year. The Nebraska Centennial NWS-Observer celebration scheduled for June 1, 1991 will honor 37 communities and their associated observers for their service to the Cooperative Observer program. In conjunction with this celebration, their weather records will be entered into the CLICOM data base before years end. A high priority project will be to develop a new graphical package for inclusion into the Nebraska monthly climate update along with data analysis directed towards the agricultural sector, which is the predominant business sector of the Nebraska economy.

"The Nebraska Centennial NWS-Observer celebration scheduled for June 1, 1991 will honor 37 communities..."

"The retrieval routine makes the data accessible by geographically panning and zooming to a given area on a global display..."

Although the duties of state climatologist and climate specialist for the High Plains Climate Center have put my plans to pursue a doctorate in Agricultural Meteorology on hold, I plan to pursue this avenue in the near future. As for now, I am enjoying the learning experience afforded me by the Nebraska SC position and look forward to meeting and working with the other SCs throughout the nation.

Alan Dutcher
Nebraska State Climatologist

Editor's Note:

We understand that John Purvis has retired as the South Carolina State Climatologist. Perhaps we'll hear more in the next issue of The State Climatologist.

INTERNATIONAL STATION METEOROLOGICAL CLIMATE SUMMARY - NEW AND EXCITING

The National Climatic Data Center, in cooperation with the U.S. Navy and U.S. Air Force, has developed an International Station Meteorological Climate Summary CD-ROM Version 1.0 (i.e., the ISMCS) containing detailed climate summaries for 640 world wide stations and 5434 of the World Wide Airfield Summary stations as "fillers" in sparse regions. The detailed summaries contain up to 40 separate tables with 1 to 108 sub-tables. The retrieval routine makes the data accessible by geographically panning and zooming to a given area on a global display or by directly selecting a station from one of seven identifiers, such as name, WMO#, or country. The data include surface air temperature, humidity, winds and precipitation at the sites. Five basic types of summaries are contained on the ISMCS: U.S. Navy Personal Computer Version of Summary of Meteorological Observations Surface (PC-SMOS), NOAA PC-SMOS, U.S. Navy Foreign PC-SMOS, USAFETAC Personal Computer Version of Surface Observation Climatic Summary (PC-SOCS), and U.S. Navy World Wide Airfield Summaries (WWAS).

The software is contained on the CD-ROM and is menu driven with on-screen directive prompts. Detailed help screens describe the system at all levels of the system and serve as the Users' Manual. The CD-ROM is available for $50 from NCDC.

Claude Williams
NCDC/Global Climate Lab

CENTENNIAL COOPERATIVE NATIONAL WEATHER SERVICE STATIONS IN ILLINOIS

Cooperative National Weather Service (NWS) stations have been in existence since the mid-1850s. These sites take daily measurements of maximum and minimum temperature and

precipitation and snowfall during the previous 24 hours, and snow on the ground at the time of observation. Instruments are provided to the non-professional observers, and they are trained by the NWS Cooperative Program Manager for that state.

At the same time each day, the observer reads the instruments, resets the max and min thermometers, and records the observation. At the end of the month, a paper copy of the observations is sent to the National Climatic Data Center (NCDC), Asheville, NC, who keys the data and enters them into the archive.

Twenty-five present and past centennial station observers and their guests attended."

There are about 6,000 such sites in the U.S., and about 200 in Illinois, some measuring only precipitation, and not all reporting to the NWS.

NCDC had identified some 28 Illinois sites with at least 100 years of continuous record. In addition, the Illinois State Water Survey (ISWS) identified another 30 stations from its archives, data which they are currently keying directly from the original hard copy daily data, yielding a total of 58 centennial sites in Illinois.

In late October and early November 1990, to commemorate the centennial stations, the ISWS hosted dinners for present and past observers of the centennial stations. Four dinners were held, one each in Woodhull (northwestern Illinois), Mt. Vernon (southern Illinois), Springfield (central Illinois) and Urbana (east-central Illinois). Twenty-five present and past centennial station observers and their guests attended.

"He also reviewed prominent Illinois weather events of the 19th Century..."

National Weather Service personnel were represented at all dinners. William Buckingham, the NWS Cooperative Program Manager for Illinois, attended all meetings. In addition, Paul Dailey NWS Area Manager from the O'Hare NWS station, Jim Meyer, MIC of the Moline NWS station, Steve Thomas (MIC) and Ernest Goetsch of the St. Louis office, and Charles Finley, MIC of the Springfield NWS office, attended one or more meetings.

State representatives Karen Hasara and Helen Satterthwaite attended the meetings, as did Representative Administrative Assistants Sandy Hecht (to Rep. Karen Hasara) and Adam Hirschfield (to Rep. Tim Johnson). Dr. Donald Holt, Director of the Illinois Experiment Station, attended the Urbana meeting.

Each meeting included a short reception, followed by a dinner, hosted by the Water Survey. Wayne M. Wendland, ISWS and Illinois State Climatologist, welcomed the groups, and introduced the attendees. He then presented a short review of the history of weather observing in Illinois, including the increase in numbers of participating stations and the distribution of observers from the mid-1800s. He also reviewed prominent Illinois weather events of the 19th century and the change in the managing organization, first under the auspices of the Smithsonian Institution, followed by the Signal Corps of the U.S. Army, the U.S. Weather Bureau, and the National Weather Service.

Comments were offered by the NWS and other invited guests, after which certificates from NCDC were presented to the attending observers, attesting to their centennial event. The Water Survey presented certificates to the observers and the mayors of the respective cities.

Wayne Wendland
Illinois State Climatologist

The site preparation for NCDC's new home is now underway. The government has purchased the land and the old buildings are being torn down. The new building should be completed in 1993-94.

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