

NCC BRIEFS

NCC is pleased to announce that three more States - Idaho, Kentucky, and Ohio - have recently established SC positions. Also, there is a new SC for the State of North Dakota, replacing Dr. J. M. Ramirez. The new SC's are as follows:

DR. MYRON MOLNAU
College of Agriculture
University of Idaho
Moscow, ID 83843

MR. GLEN CONNER
Dept. of Geography & Geology
Western Kentucky University
Bowling Green, KY 42101

DR. JOHN W. ENZ
Department of Soils
Walster Hall
North Dakota State University
Fargo, ND 58102

PROFESSOR JOHN N. RAYNER
Department of Geography
Ohio State University
1775 S. College Road
Columbus, OH 43210

Negotiations are underway with representatives of three other States - Mississippi, Oregon, and Pennsylvania; hopefully, they will establish SC programs in the near future.

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NCC was happy to host the first scheduled meeting of the AASC, which was held at this Center on October 26 & 27, 1977. NCC has actively pursued the development of a State funded SC program in each State to replace the former NOAA SC program. As of March 1978, there are 35 States with an active program. These SC's are professionals and many are associated with universities. The group has a formal organization, American Association of State Climatologists; NCC is an ex-officio member of the Association which could be used as a vehicle to expand the already existing Coastal Zone Management Program activities of some members. EDS-NCC has obligated a portion of its base funds for use in supporting the data/information needs of these professionals. NCC is investigating ways of getting data to the SC's in order to serve the greatest part of the public possible. These plans include automation to increase the amount of services without significant cost increases and installation of interface systems so that SC offices can have direct access to the NCC data base.

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USSR ANTARCTIC AND EURASIAN UPPER AIR DATA - As a part of the continuing data exchange through the World Data Center system, the USSR recently sent nearly 100 35mm microfilm reels of checked upper air data for their stations. The data may be borrowed from World Data Center A for Meteorology, NCC, telephone 704 258-2850, Ext. 754, or FTS 672-0754.

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NEW CLIMATE AND HEALTH BROCHURE - A brochure "Climate and Weather Data for Physicians and Health Researchers" has been printed and a copy will be sent to each SC. The purpose is to acquaint the medical community with the EDS data sources. Comments about it and requests for additional copies should be addressed to Bill Hodge, Climate and Health Project, NCC.

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COUNTY DATA - Several SC's sent comments concerning the need or lack of need for data by county (see Newsletter Volume 1, Number 3). All were useful and will be considered in our planning. The importance of county data varies from one part of the country to another. In some States the county system is almost obsolete; in others, it is used extensively.

Our interest is prompted by a need to correlate mortality and health data with meteorological data. Most national medical data bases group data by counties or clusters of counties, except in metropolitan areas. We are developing a tape which will identify the county and census area each station is in. Its purpose is to simplify computer programs making use of data from both disciplines. An announcement in a future Newsletter will tell when it can be ordered.

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NCC's HISTORICAL DATA BASE PROJECT - NCC is assembling a historical data base for climate analysis and research. A three-pronged effort has been underway to: (1) assemble a data inventory of long-term series of meteorological data containing all the available information as to its quality (homogeneity) by State; (2) compile specialized data sets of the longest term instrumental records for use in climate diagnostics, verification of proxy data and other applications; and (3) to digitize back to the late 1800's the network of climatological stations whose present form make up our national cooperative network. Data is currently digitized only to about 1931.

Some of the data sets that we have compiled under item 2 above include:

1. State-wide averages of monthly temperature and total precipitation. The longest series belongs to Iowa which begins in 1873, the shortest to California which starts in 1897. Regional (corresponding to the nine U. S. Census regions) and national time series (also areally weighted) have also been compiled from the State data. Time series corresponding to seasonal combinations of various months have also been completed by State, region, and national groupings.

2. Population-weighted heating degree days by State, region, and national groups for the same period of record as is available for the State-wide average temperature data.

3. A station network of about 55 stations comprising the longest available periods of record. Regional sub-networks for use as a quick index of large scale temperature anomalies is also available.

The assistance of SC's to ensure that the old series are complete, correct, and well documented would constitute a significant contribution to our national climate program.

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RECORDS DISPOSITION - Several SC's have been asking about the status and long range plans of this program. To bring you up to date, film containing the following records have been determined to meet our archival specifications for microforms:

<u>Form Number</u>	<u>Type of Record</u>	<u>Period of Record</u>
WBAN 20	Winds Aloft Computation Sheet	1967-1976
WBAN 22	Winds Aloft Summary Form	1919-1964
WBAN 33	Summary of Constant Pressure Data	1936-1973

Disposition actions have already begun on the WBAN 20's and some of you may already have received them. Those of you who haven't should soon be receiving a notice that they will be mailed to you. All boxes will be sent by ordinary mail, so you will be getting just a few at a time.

The WBAN 33's will be sent next, followed by the WBAN 22's. Please recognize that to pack and ship these records takes time and that they will be sent as fast as possible within our available resources.

Looking further ahead, we are currently filming the most recent 30 years of records for NWS first order stations and military stations. The exact period covered is 1948 through 1977. When this phase is completed, we plan to film records in the following order of priority for the same 30-year period: (1) FAA and NWS second order, (2) Cooperative Observer's, and (3) selected autographic. After this 30-year micrographics data base has been established, records for periods prior to 1948 will be filmed in the same order of priority as given above.

The entire filming project could take anywhere from 5 to 15 years depending on the resources allocated for the work. Throughout the filming process, records that have been satisfactorily placed on film will be sent to the SC's when they are no longer needed by NCC. Since it is difficult to predict a reliable timetable for disposal actions, SC's should expect to receive records in varying time intervals and volumes throughout the next five or more years.

Of course, any of the above plans are subject to change. If you have any questions about the program or need some special assistance, feel free to phone Tom Prizio (Ext. 785) or Bill Bartlett (Ext. 275). They will be glad to help you if they can.

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NCC BRIEFS

NCC is pleased to announce that five more States - Alabama, Hawaii, North Carolina, Oregon, and Rhode Island, have recently established SC positions. The new SC's are as follows:

MR. EUGENE A. CARTER
Johnson Environmental & Energy Center
The University of Alabama in Huntsville
P. O. Box 1247
Huntsville, AL 35805

DR. W. LAWRENCE GATES
Director, Climatic Research
Institute
Oregon State University
Corvallis, OR 97331

MR. SAUL PRICE
Division of Water & Land Development
Department of Land & Natural Resources
State of Hawaii
P. O. Box 373
Honolulu, HI 96809

DR. JAMES M. HAVENS
Department of Geography & Marine
Affairs
University of Rhode Island
Kingston, RI 02881

DR. PETER ROBINSON
Department of Geography
University of North Carolina
Chapel Hill, NC 27514

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NARRATIVE WEATHER SUMMARY - State Climatologists are encouraged to prepare a narrative weather summary for inclusion in the monthly Climatological Data (CD) bulletin for their State. This should be done primarily on occasions of outstanding or unusual weather. The question of appropriate weather phenomena to be included in such a narrative will be left to the judgement of the climatologist; but considerations should be given to significant monthly anomalies of temperature and/or precipitation, unusual daily temperature extremes, flooding, drought, snow (unusual for the area or season), hurricanes, severe local storms, etc.

The story should be submitted to NCC before the end of the following month. It should be understood that the narrative could be subject to minor editing at NCC to assure compatibility to the accompanying published data, but the SC would be consulted if any extensive revision seemed necessary.

In a few States, the NWS Forecast Office is preparing a narrative weather summary for the CD when they feel it is appropriate. In these States, a working liaison is encouraged between the SC and the Meteorologist In Charge as to who should submit the story, and what will be the content.

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Two sample publications - Prototype Data Inventory and Station Climatic History - have been assembled at NCC as part of an effort to develop long-term data inventories for the United States and compile climatological time series for selected long-period stations. The purposes of this project are:

1. To determine the existence of recorded meteorological data during the 1800's and to synthesize available station documentation into a single reference source.

2. To create a unique digital data file of long-term climatological data for stations selected on the basis of the availability of adequate documentation regarding location, instrumentation exposure and observing practices.

Our intent is to produce a data inventory for each State and to do a number of individual station summaries. The State inventories will become a digitized information file amenable for computer information retrieval systems. A copy of each publication will be mailed to all SC's. We invite your comment regarding the contents and format of these publications.

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CLIMATIC ATLAS OF ALASKA'S OUTER CONTINENTAL SHELF - EDIS/NCC and the University of Alaska's Arctic Environmental Information and Data Center (AEIDC) have jointly compiled the Climatic Atlas of the Outer Continental Shelf Waters and Coastal Regions of Alaska. The atlas has three volumes: I. The Gulf of Alaska, II. The Bering Sea, and III. The Chukchi and Beaufort Seas covering the area from 50° - 75°N, 130° - 180°W. It was published in support of NOAA's Outer Continental Shelf Environmental Assessment Program for Alaska, being carried out for the Department of the Interior's Bureau of Land Management.

Each volume describes the climatology of the area and presents data analyses of surface marine and atmospheric parameters which will aid in assessing the risks involved in the construction and operation of energy-related structures in these Alaskan coastal waters. The climate data in each volume are presented in monthly isopleth maps and statistical graphs and tables. Elements included are: clouds, visibility, fog, precipitation, air and sea temperatures, waves, winds, sea-level pressure, and extratropical cyclones. The climatological analyses are based on 600,000 surface marine observations and on two million 3-hourly surface observations for 49 selected coastal stations contained in NCC's digital data base.

As marine data are typically sparse in the near coastal zone - an area of sharp gradients and complex climate - data from land stations were included to develop the best possible climatological picture. Environmental records and publications held by NCC and AEIDC provided supplemental information.

Each volume is 11½" x 11½" and contains 409 to 433 pages. Volumes I and II each contain 228 pages of three-color maps. Each map has an opposing page of graphs for selected marine and coastal stations. For those

parameters that apply only to marine areas, such as sea-surface temperatures and wave data, the maps and graphs are on the same page. Volume III has fewer maps, since sea ice makes marine data sparse during winter months. The remaining pages for each volume consist of sections on selected topics such as storm surges, sea ice, weather extremes, tides, bathymetry, and ocean currents.

The atlas is available from the Arctic Environmental Information and Data Center, University of Alaska, 707 A Street, Anchorage, Alaska 99501, for \$5 per volume (\$15 for all three), plus postage and handling. A limited number of copies of the atlas are available from NCC.

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NCC has published a "Summary of Synoptic Meteorological Observations (SSMO)" for Valdez and Cape Hinchinbrook, Alaska, and the adjacent marine area. Preparation of this SSMO was initiated for and supported in part by NOAA's Outer Continental Shelf Environmental Assessment Program for Alaska, being carried out for the Department of Interior's Bureau of Land Management; the funding for completion was made possible through the Marine Pilot Program of NOAA's National Oceanographic Data Center.

The monthly and annual statistical tables summarize wind direction and speed, weather occurrences, cloud amounts, ceiling height, visibility, precipitation, dry-bulb temperature, relative humidity, air-sea temperature difference, sea height and period, sea surface temperature, and sea-level pressure.

The data contained in these tables were obtained from Tape Data Family 11 (TDF-11), Marine Surface Observations, and Tape Data Family 14 (TDF-14), Land Surface Observations. Data for Valdez and Cape Hinchinbrook were edited and keyed to magnetic tape for a ten year period: Valdez hourly observations varied from 0800-1600 LST to 0500-2000 LST for the period July 1967 - June 1977; Cape Hinchinbrook observations were three hourly observations from 0100-1900 LST (excluding 1600 LST) for the period July 1964 - June 1974. The marine area in this volume is defined 59°N to Alaska's Coast, 144° - 149°W. The marine data contains weather observations taken aboard vessels of varying registry over the period 1929 - 1977.

A limited number of copies of the SSMO are available from NCC.

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