

METEOROLOGY

Winter Weather Record

Official confirmation has arrived: the 1957-58 winter saw records set for cold weather and storms in many parts of the country, with abnormally mild weather in the Far West.

See Front Cover

► FOR THOSE who want official confirmation, the Weather Bureau in Washington agrees: It was an unusual winter.

Prolonged cold in the Southeast, paralyzing snowstorms in the Northeast, tornadoes in the Midwest and South, and persistent, abnormally mild weather in the Far West were the main weather highlights for the winter season.

Persons still digging out from exceptionally heavy snows in the Northeast may find it hard to believe, but the winter season as far as weathermen is concerned starts on Dec. 1 and ends the last day of February. Having now had a chance to correlate and compare information from the 1957-58 winter, weathermen found many new records were set.

More than half the nation had average temperatures above normal, including all areas west of the Continental Divide, the northern Plains states, most of Wisconsin and Michigan, and the extreme Northeast.

Florida has Record Low

Florida, on the other hand, had its coldest winter. New records for sustained cold and frequency of freezes were set from almost one end of the state to the other. It was the first time that Florida experienced severe freezes in all three winter months. For most of the state, average temperatures for the period from December through February were the lowest on record.

Florida's cold winter season with frequent rains was one of the worst for agricultural interests in the history of the state and very adversely affected the tourist business.

The cold wave that pushed the freeze-line into southern Florida on February 17 and 18 affected virtually all areas east of the Rocky Mountains. The week ending Feb. 16 averaged more than 20 degrees below normal in the middle and lower Mississippi Valley, the coldest week in some sections there in many years.

The most notable temperature recorded during this cold period was 23 degrees below zero at Mt. Mitchell, N.C., the lowest temperature ever recorded in that state.

Frequency of heavy snowstorms in the Northeast was almost as remarkable as the unparalleled cold in the Southeast. Most of these storms came either from the mid-continent area or up the Atlantic Coast. Two occurred during the first half of December, and three major ones during January.

During the first week of February, another Midwestern storm, after leaving four to ten inches of new snow in parts of Missouri and Illinois, produced a foot in

the central Appalachians, up to ten inches along sections of the New Jersey coast and about seven inches in southeastern Massachusetts.

This storm was followed by a coastal one on Feb. 7 to 9, which dumped ten inches of additional snow in eastern portions of Pennsylvania and New York, and up to 18 inches in northern New England.

Stormy February

Another Atlantic coastal storm Feb. 15 to 17 brought heavy snow to the entire Northeast, with amounts exceeding a foot in many sections. It produced blizzard conditions in large areas and left a snow cover that measured 14 inches in Washington, D. C., up to 30 inches in eastern Pennsylvania, 20 inches in eastern New York and up to 20 inches in most of New England.

Boston measured a fall of 19.4 inches, which set new records there for 24 hours and for a single storm.

February closed with a raging blizzard in the northern Plains states, where many roads were closed by heavy snow drifted by winds up to 50 miles per hour, and another storm in the Northeast that was responsible for four to eight inches of new snow in northern New England.

Syracuse, N.Y., reported an all-time record for any month, a total of 72.6 inches of snow during February.

While the South shivered and the East was digging out from recurring snows, the Far West was enjoying abnormally mild temperatures that, at times, reached spring-time levels. The relatively mild weather persisted through December and January in the northern Plains, where the Missouri River at Bismarck, N.D., did not freeze completely over until Dec. 31, the latest date on record, and lake navigation closed 20 days later than average at Green Bay, Wis.

The winter was wet both in the Far West and east of the Mississippi River. Heavy precipitation in the Northeast completely relieved the effects of the summer and fall drought, and brought the possibility of heavy spring floods.

The striking cloud picture on the cover of this week's SCIENCE NEWS LETTER is of what meteorologists call a "meso disturbance" associated with severe storms and tornadoes. Taken at night, at 8:15 p.m., in Minnesota, the cloud formation was followed by a hail storm with stones up to one inch in diameter formed.

A major outbreak of tornadoes in the middle Mississippi Valley on Dec. 18 was unusually far northward for the time of year, when more than a score of tornadoes touched the ground in Illinois alone that

day. Several persons were killed, hundreds injured and property losses mounted into the millions.

The Weather Bureau's report of the unusual 1957-58 winter is contained in the *Weekly Weather and Crop Bulletin*, edited by J. L. Baldwin.

Science News Letter, April 5, 1958

RADIO

Saturday, April 12, 1958, 1:30-1:45 p.m., EST

"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio network. Check your local CBS station.

Dr. Wynne Sharples, president and founder, National Cystic Fibrosis Research Foundation, Philadelphia, Pa., will discuss "A Deadly Childhood Disease."

SCIENCE NEWS LETTER

VOL. 73 APRIL 5, 1958 NO. 14

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright © 1958 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also publishes CHEMISTRY (nine times a year) and THINGS of Science (monthly).

Printed in U.S.A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1897. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40 P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283) authorized February 28, 1950. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Karl Lark-Horowitz, Purdue University; William W. Rubey, U. S. Geological Survey; Wallace R. Brode, National Bureau of Standards. Nominated by the National Academy of Sciences: George W. Corner, Rockefeller Institute for Medical Research; Edward U. Condon, Washington University; Harlow Shapley, Harvard College Observatory. Nominated by the National Research Council: Jerome C. Hunsaker, Massachusetts Institute of Technology; I. I. Rabi, Columbia University; Leonard Carmichael, Smithsonian Institution. Nominated by the Journalistic Profession: Neil H. Swanson, Garrison, Md.; O. W. Riegel, Washington and Lee University; Michael A. Gorman, Flint Journal. Nominated by the Scripps Estate: Charles E. Scripps, Cincinnati, Ohio; Edward J. Meeman, Memphis Press-Scimitar; Frank Ford, Washington, D. C.

Officers — President: Leonard Carmichael; Vice President and Chairman of Executive Committee: Charles E. Scripps; Treasurer: Wallace R. Brode; Secretary: Watson Davis.

Staff — Director: Watson Davis. News Editor: Howard Simons. Writers: Marjorie Van de Water, Ann Ewing, Jane Marye, David Pursglove, Benita Tall. Science Youth Division: Harold A. Edgerton, Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562.