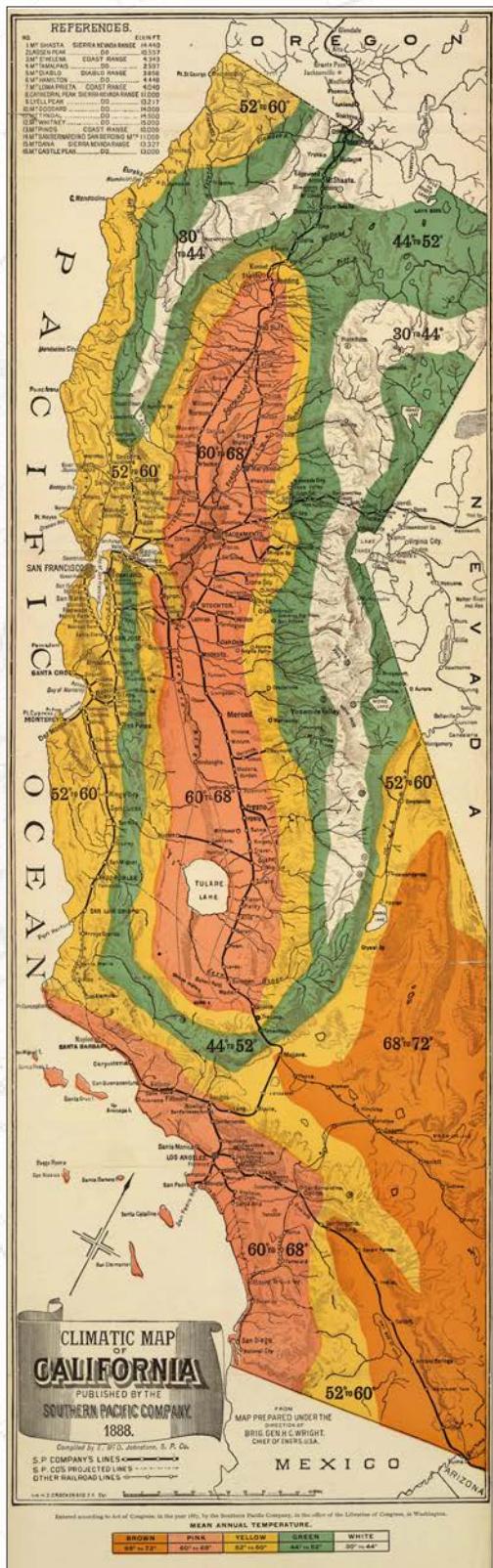


THE HISTORY OF CARTOGRAPHY



November 2018

Dear Friends,

The season is changing, and I am writing to ask for your support. At this time of year I also start eyeing local weather maps, watching for the arrival of snow. (I sometimes begin to envy others—just look at California's warm temperatures!) It is easy to take the maps for granted, but the precision with which modern weather maps monitor daily conditions, track exceptional storms, describe climate extremes, and forecast future weather events, anywhere in the world, is remarkable. Nineteenth-century scientists helped make this possible, as the article and maps shown here and on the reverse explain.

The history and development of weather, climate, and meteorological maps is just one topic covered in *The History of Cartography*. By teaching us to interpret all maps through a cultural lens, the *History* allows us to see new relationships between other people, the physical world, and the maps we use today. It helps us not only to understand our past but also to influence current affairs.

You can have an impact on scholarship and the humanities. Please support the History of Cartography Project. Volume Six went online last summer (www.press.uchicago.edu/books/HOC). Volume Four will be published in 2019. All entries for Volume Five, the final installment of the series, will be written soon and primary editing will be complete next summer. These massive volumes are prepared in a quirky university office where temperatures occasionally vary 20°F in one day—though this is Wisconsin, where we've always said, if you don't like the weather just wait five minutes! Hot or cold, we're eager to keep working. May I count on your support?

Please make a gift and keep the series moving toward completion. We're nearly there, but we still need your help.

Many thanks,

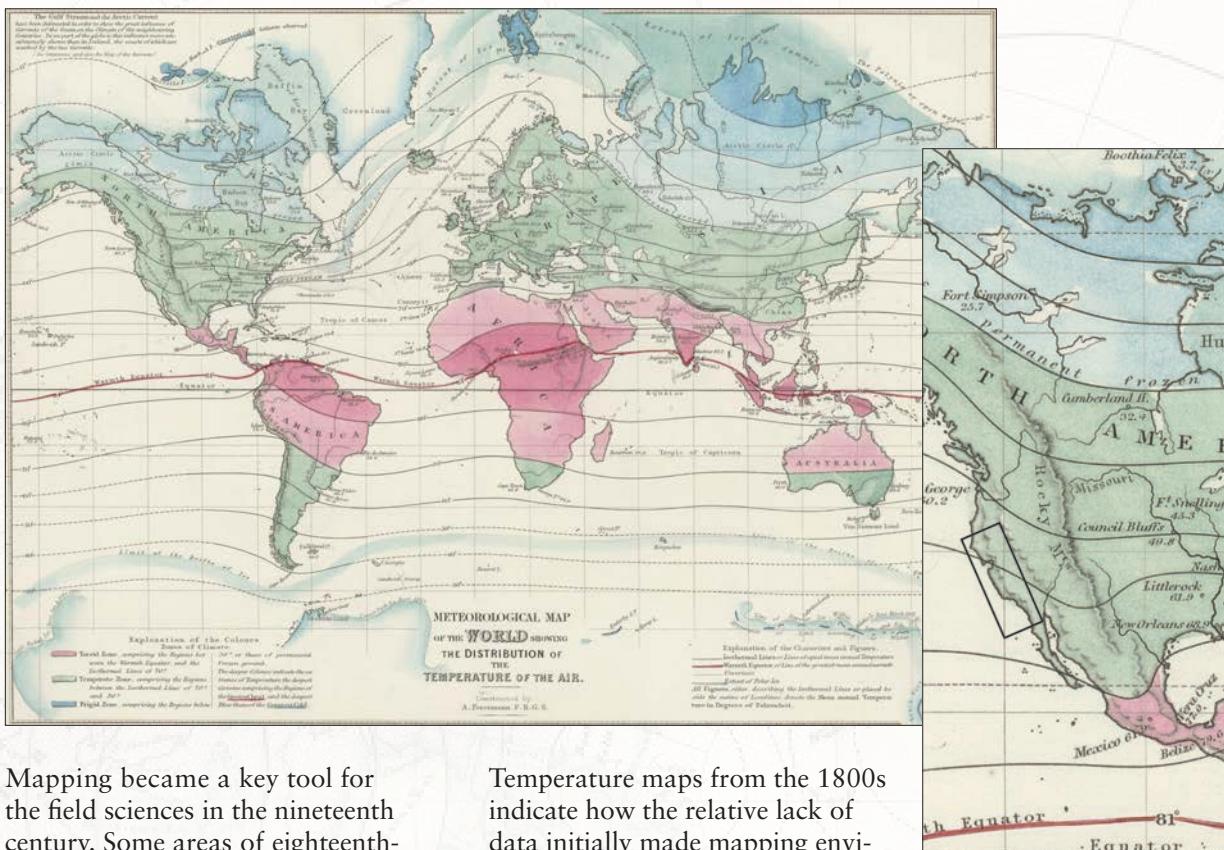
Matthew Edney
Project Director

DONATE ONLINE
supportuw.org/giveto/histcart

By PHONE
608-263-4545

By MAIL UW Foundation (account 112414290)
U.S. Bank Lockbox; Box 78807; Milwaukee WI 53278-0807

MAPPING TEMPERATURE



Mapping became a key tool for the field sciences in the nineteenth century. Some areas of eighteenth-century natural philosophy had already developed a strongly empirical nature: scholars examined the world around them closely, seeking information that could be combined to reveal rules or even natural laws. Maps became devices for reducing and comparing observations and evolved into the first thematic maps. After 1800 Alexander von Humboldt had great success correlating the distribution of plants in South America to altitude and temperature through a series of maps and diagrams. This led field scientists to adopt a newly inductive and spatial approach to their studies. Scientists began to collect and map vast quantities of data about the global environment.

Temperature maps from the 1800s indicate how the relative lack of data initially made mapping environmental phenomena difficult. It was possible to collect precise facts from established stations and use the information to describe detailed changes related to time, but the observation sites were too scattered to support anything other than highly generalized, global mapping. The map above includes isotherms (lines of equal temperature) in broad ten-degree bands, and it shifts to dotted lines where data is uncertain. Eventually, however, observation stations became sufficiently dense for meteorologists to produce more complete and accurate maps showing temperature variation (as shown on the front) and then, after 1900, to conceptualize broader climatic zones.

Above, with detail: August Petermann, Meteorological Map of the World Showing the Distribution of the Temperature of the Air (1850), from his Atlas of Physical Geography (1850). Front: E. McD. Johnstone, Climatic Map of California (1888). Background: Heinrich Berghaus, Die Isothermkurven der Nördlichen Halbkugel (1838), from his Physikalischer Atlas (1848). All images courtesy of the David Rumsey Map Collection.

Environmental maps became increasingly complex during the nineteenth century. Compare the 1888 California map on the front to the 1850 world map above (California is outlined in the detail).

Advances in the twenty-first century made it possible to create animated visualizations of global environmental conditions. View online: www.nvnl.noaa.gov/weatherview/ earth.nullschool.net/about.html

We appreciate every gift. Visit geography.wisc.edu/histcart/acknowledgment to learn more. Special thanks to the National Endowment for the Humanities, National Science Foundation, University of Wisconsin–Madison (College of Letters & Science and the Office of the Vice Chancellor for Research and Graduate Education [Wisconsin Alumni Research Foundation]), Caxambas Foundation, Gladys Krieble Delmas Foundation, Arthur and Janet Holzheimer, Salus Mundi Foundation, and John Taylor.