For many years now, volunteers working from home—people like you—have been able to help scientists with important problems.

In the first wave of these "citizen science" projects, people simply lent their computers to help solve problems that could be farmed out in pieces to thousands of machines. Among the first of these was searching incoming radio signals for evidence of extraterrestrial intelligence, although my favorite involved analyzing the folding of proteins to help study diseases and treatments.

More recently, people with spare time have been able to go beyond just lending their computers to take a much more active role. Sitting at home in your pajamas, you can perform tasks like transcribing data from antiquated written records. As I pointed out last year, anybody who cares about climate science can get in on the act, helping to digitize paper records from old ships' logs and weather balloons.

The Old Weather project might be the most interesting of these schemes, but in its initial incarnations, only British ships were included among the logs to be transcribed. Now two American agencies, the National Oceanic and Atmospheric Administration and the National Archives and Records Administration, have joined forces with Old Weather to put American ships' logs into the mix.

The first records in need of transcription are logs from Arctic expeditions that sailed between 1850 and World War II. "Participants in Old Weather-Arctic will be able to work with the logbooks of the doomed 1879 U.S.S. Jeannette Arctic expedition, the Revenue Cutter Thomas Corwin that carried the famous naturalist John Muir to the far north in 1881, and the Coast Guard cutter Bear that sailed the coasts of Alaska for nearly 50 years," NOAA says.

The information in these records that will be most useful to climate scientists is weather data, of course. But the material is also expected to find uses in other fields, including history and genealogy. How cool would it be to know the exact date and time and place that your great-great-great-grandfather stood on the deck of the Bear to record the frigid weather off the Alaskan coast?

Go here to sign up, then click on the Old Weather link.