

Current climate data rescue activities in Australia

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View of Melbourne from the Observatory on Flagstaff Hill, 1858, by George Rowe. Credit: The State Library of Victoria

Long-term weather data is the backbone of almost all research into climate change and variability. The recovery of historical instrumental data is a well-established practice in the Northern Hemisphere, where observations are available for the past several centuries in many regions.

In the Southern Hemisphere, however, the currently available set of [climate observations](#) generally only begins in the early to mid-20th century. This makes it a lot harder to study the climate, and [climate change](#), in the southern latitudes.

But this does not mean that there are no historical weather records down south.

In a recently published article in *Advances in Atmospheric Sciences*, Dr. Linden Ashcroft (University Roviera I Virgili, Spain) and her co-authors from the U.K. and Australia draw attention to the recent data rescue

efforts being undertaken in Australia.

These range from international initiatives such as the South Eastern Research Climate project (SEARCH), to volunteer organisations working with families who have uncovered their grandfather's long-lost weather diaries.

According to Ashcroft, these extended sets of weather [observations](#) can

- improve future climate projections
- validate palaeoclimate records from tree rings and ice cores, and
- put our current climate into a long-term context, helping scientists identify what is natural, and what is human-induced climate change.

"The stories of these meteorological pioneers deserve to be shared, and the data they painstakingly collected more than a century ago are still very useful today," says Ashcroft.

The data they have uncovered are already contributing to international datasets that are in turn being used to build global models of the atmosphere. The addition of even one new [weather](#) station can dramatically improve the accuracy of these models for the Southern Hemisphere.

More observations are now being found in ship logbooks, settler's journals and colonial records in the Southern Hemisphere. "Through our efforts and those of others, and we are slowly shedding more light on our important climatic past. " says Ashcroft.

More information: Linden Ashcroft et al, Current climate data rescue activities in Australia, *Advances in Atmospheric Sciences* (2016). [DOI: 10.1007/s00376-016-6189-5](https://doi.org/10.1007/s00376-016-6189-5)

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