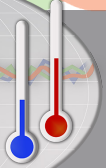


A Global Parallel Station Data Archive to Study Non-Climatic Changes in the Climate Record

International
Surface
Temperature
Initiative



Long instrumental climate records are usually affected by non-climatic changes, such as relocations and changes in instrumentation, instrument height or procedures. They can hamper the assessment of trends and variability in climate records by distorting the climate signal, especially when it comes to trends in extreme weather.

The most direct way to study the influence of these non-climatic changes and to understand the reasons for these biases is the analysis of parallel measurements representing the old and new situation (for example instruments or locations).

A GLOBAL PARALLEL CLIMATE DATASET

Current studies of non-climatic changes using parallel data are limited to local and regional case studies. However, the effect of specific transitions depends on the local climate and the most interesting questions are about the systematic large-scale biases

produced by transitions that occurred in many regions. Important potentially biasing transitions are the adoption of Stevenson screens or the introduction of automatic weather stations. Thus a large global parallel dataset is highly desirable as it enables the study of systematic biases in the global record.



A standard Stevenson screen and a historical French screen measuring in parallel at an observatory in Basel, Switzerland.

For more information on this initiative and the people behind it, please go to <http://tinyurl.com/ParallelDataset>
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