Session: C13 Poster: T03A

The International Surface Temperature Initiative: Global land surface databank development

Jay Lawrimore[†]; Waldenio Gambi de Almeida; John Christy; Meaghan Flannery; Albert Klein-Tank; Koji Ishihara; Bryan Lawrence; David Lister; Matthew Menne; Vyacheslav Razuvaev; Matilde Rusticucci; Madeleine Renom; Jeremy Tandy; Peter Thorne; Steven Worley
[†] NOAA NCDC, USA
Leading author: Jay.Lawrimore@noaa.gov

This poster provides an overview of a new international effort to construct a global land surface temperature databank that meets 21st century requirements for weather and climate information. As part of the incipient International Surface Temperature Initiative that was initiated in September 2010, this effort builds upon pioneering efforts from the 1990s and brings them together to construct comprehensive global datasets. These fully open access collections will be the basis for understanding past and future climate variability and change. A Databank working group consisting of regional representatives is creating solutions associated with the need to improve spatial and temporal coverage, data provenance, openness, and transparency of surface temperature dataset development. Included in these efforts are activities focused on data rescue and collection of original paper records, digitization of imaged forms, data provenance and version control management, and the architecture of a databank that consists of four stages of data. The methodologies established will preserve the lineage of temperature observations from the point of observation to their entry into a global collection of merged temperature records. This will provide the authoritative source of surface temperature data from which other efforts can build upon to construct global records of high quality, homogeneous, and accessible data.