National Environmental Public Health Tracking Network
Palmer Drought Severity Index (PDSI) Metadata

Publication Date	01/11/2017
Background	The Palmer Drought Severity Index (PDSI) is a standardized index that uses readily available temperature and precipitation data to estimate relative dryness. It has been reasonably successful at quantifying long-term drought. As it uses temperature data and a physical water balance model, it can capture the basic effect of global warming on drought through changes in potential evapotranspiration. The dataset includes monthly values for every contiguous US county and the District of Columbia from 1895-2016. The dataset has been compiled to estimate wetness and dryness of a particular area. This is important for the agriculture as well as health sectors. The data can be used to examine local and national trends in drought information.
Data Values	Range from -10 (dry) to +10 (wet). Missing data is noted as -99.99.
Geographic Scale & Scope	Data includes all counties in the lower 48 states plus the District of Columbia.
Time Period	January 1, 1895 – December 31, 2016. Known to be accurate as of time period end date.
Raw Data Processing	Data were downloaded from the National Oceanic and Atmospheric Administration (NOAA) server and were originally provided as monthly values for a climate division (typically 5-10 divisions per state). Distance weighting functions were applied to constrain the drought values to a specific US county. No data were lost or omitted during calculation. All data that were available were used. Data will be updated on an ad hoc basis, when necessary.
Additional Information	Dai, Aiguo & National Center for Atmospheric Research Staff (Eds). Last modified 19 Apr 2016. "The Climate Data Guide: Palmer Drought Severity Index (PDSI)." Retrieved from https://climatedataguide.ucar.edu/climate-data/palmer-drought-severity-index-pdsi. Palmer, W.C., 1965: Meteorological drought. *Research Paper No. 45.* U.S. Weather Bureau. [NOAA Library and Information Services Division, Washington, D.C. 20852].