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- We acknowledge the modeling groups, the Program for Climate Model Diagnosis and Intercomparison (PCMDI) and the WCRP's Working Group on Coupled Modelling (WGCM) for their roles in making available the WCRP CMIP3 multi-model dataset, <<http://www-pcmdi.llnl.gov/projects/cmip/index.php>>. Support of this dataset is provided by the Office of Science, U.S. Department of Energy. For an overview and documentation of the CMIP3 modeling activity, see Meehl, G.A., C. Covey, T. Delworth, M. Latif, B. McAvaney, J.F.B. Mitchell, R.J. Stouffer, and K.E. Taylor, 2007: The WCRP CMIP3 multi-model dataset: a new era in climate change research. *Bulletin of the American Meteorological Society*, **88**(9), 1383-1394.
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1. Heat waves:
 - The GHCN-Daily dataset from NCDC was used <<http://www.ncdc.noaa.gov/oa/climate/ghcn-daily/>>
 - Data from 979 U.S. stations having long periods of record and high quality.
 - At each station, a day was considered hot if the maximum temperature for that day was at or above the 90% of daily maximum temperatures at that station.
 2. Air stagnation:

- For each day in summer and at each air-stagnation grid point, it was determined if that location had stagnant air:
 - The stagnation index was formulated by Wang, J.X.L. and J.K. Angell, 1999: *Air Stagnation Climatology for the United States (1948-1998)*. NOAA/Air Resources Laboratory atlas no.1 NOAA Air Resources Laboratory, Silver Spring, MD, 74 pp. <<http://www.arl.noaa.gov/documents/reports/atlas.pdf>>
 - Operational implementation of this index is described at <<http://www.ncdc.noaa.gov/oa/climate/research/stagnation/index.php>>
- Note:* Although Wang and Angell used a criteria of four day stagnation periods, single stagnation days were used for this analysis.
3. For each location in the air stagnation grid, the nearest station (of the aforementioned 979 U.S. stations) was used to determine the coincidence of summer days having stagnant air and excessive heat as a percentage of the number of days having excessive heat.
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