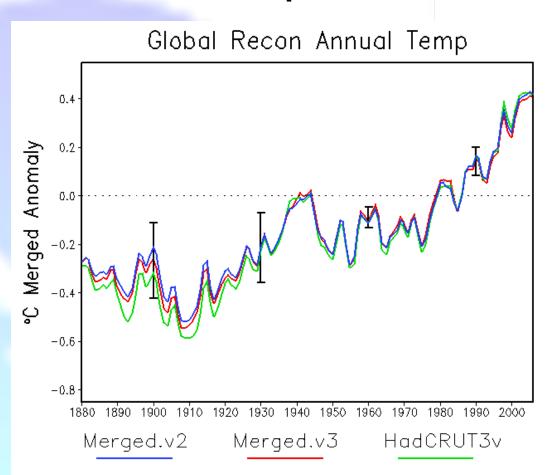
Historical Reconstruction of Surface Temperatures

- Joint work: NCDC, CICS/ESSIC, and STAR/SCSB
 - Separate SST and land temperature reconstructions merged
- Improved analyses
 - Improved tuning to better resolve historical variations and better estimate errors
- Products used for climate monitoring and prediction
 - NOAA historical temperaturemonitoring analysis
 - Contributes to national and international climate studies

Documentation:

Smith, T.M., R.W. Reynolds, T.C. Peterson, and J. Lawrimore, 2008: Improvements to NOAA's Historical Merged Land-Ocean Surface Temperature Analysis (1880-2006). *J. Climate*, **21**, 2283-2296.



Global and annual merged temperature anomalies from the old NOAA analysis (Merged.v2), the new NOAA analysis (Merged.v3), and the merged Hadley Centre and Jones analysis (HadCRUT3v). The 95% confidence limits reflecting all errors estimated for Merged.v3 are drawn for the years 1900, 1930, 1960, and 1990.