
Contents**The Corrected HadCRUT4 temperature record: Kevin Cowtan and Robert Way**

[Metadata](#)

Information about this file

[LandOceanW](#)

Annual average land and ocean temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1850-2018, (degrees celsius)

[LandW](#)

Annual average land temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1850-2018, (degrees celsius)

[LandOceanWS](#)

Annual average land and ocean temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1940-1980, (degrees celsius)

[LandWS](#)

Annual average land temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1940-1980, (degrees celsius)

<http://www.dannydorling.org/>

Metadata

These reference tables contain statistics of the temperatures from a revision of the data from the Met Office in the UK. This revision has extended the coverage of the previous data, which only covered about 84% of the planet. Here, the data are smoothed over an 11-year period. The whole time period is shown first, with a separate chart excluding the oceans. Then the period of 1940-1980 is investigated as it covers both the war period and the post-war economic boom. The graph beside each table do not give the actual temperatures but show the 'temperature anomaly' comparing each year to the average temperatures 1961-1990, and the absolute change in this temperature anomaly over time. The x-axis shows the latter while the y-axis is the temperature anomaly. Each circle represents a certain year.

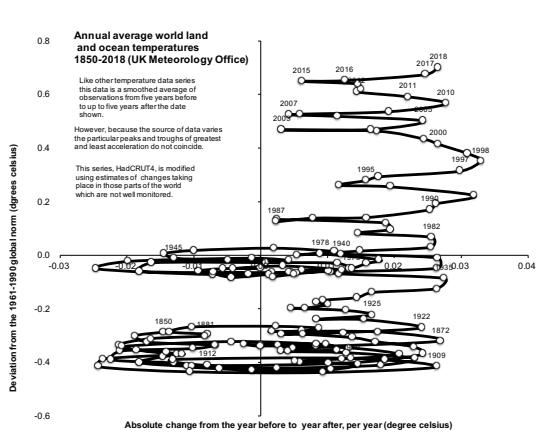
[Contents](#)

Annual average land and ocean temperatures, base period 1981-1990, with the 11-year smooth, worldwide, 1850-2018, (degrees celsius)

Source: Coverage bias in the HadCRUT4 temperature record, Kevin Cowtan and Robert Way; http://www-users.york.ac.uk/~kdc3/papers/coverage2013/had4_krig_annual_v2_0_0.txt; 24 June 2019

Frequency: Yearly, End of period

| Observation date | Absolute change (degree celsius) | Average over 11 years (degree celsius) | Temperature anomaly (degree celsius) | Label |
|------------------|----------------------------------|--|--------------------------------------|-------|
| 1850 | -0.0119 | -0.29 | -0.22 | 1850 |
| 1851 | -0.0188 | -0.30 | -0.22 | |
| 1852 | -0.0170 | -0.32 | -0.26 | |
| 1853 | -0.0067 | -0.34 | -0.32 | |
| 1854 | -0.0068 | -0.34 | -0.30 | |
| 1855 | -0.0100 | -0.35 | -0.26 | |
| 1856 | -0.0210 | -0.36 | -0.39 | |
| 1857 | -0.0223 | -0.39 | -0.49 | |
| 1858 | -0.0130 | -0.40 | -0.42 | |
| 1859 | -0.0109 | -0.42 | -0.36 | |
| 1860 | -0.0061 | -0.42 | -0.46 | |
| 1861 | -0.0012 | -0.43 | -0.49 | |
| 1862 | 0.0105 | -0.43 | -0.50 | |
| 1863 | 0.0145 | -0.41 | -0.39 | |
| 1864 | 0.0059 | -0.40 | -0.48 | |
| 1865 | 0.0051 | -0.40 | -0.34 | |
| 1866 | 0.0122 | -0.39 | -0.33 | |
| 1867 | 0.0208 | -0.37 | -0.36 | |
| 1868 | 0.0132 | -0.35 | -0.28 | |
| 1869 | 0.0048 | -0.35 | -0.31 | |
| 1870 | 0.0025 | -0.34 | -0.34 | |
| 1871 | 0.0082 | -0.34 | -0.36 | |
| 1872 | 0.0270 | -0.32 | -0.32 | 1872 |
| 1873 | 0.0175 | -0.29 | -0.30 | |
| 1874 | 0.0017 | -0.28 | -0.39 | |
| 1875 | 0.0061 | -0.28 | -0.38 | |
| 1876 | 0.0087 | -0.27 | -0.39 | |
| 1877 | 0.0023 | -0.27 | -0.01 | |
| 1878 | -0.0103 | -0.27 | 0.00 | |
| 1879 | -0.0136 | -0.29 | -0.26 | |
| 1880 | -0.0079 | -0.29 | -0.29 | |
| 1881 | -0.0082 | -0.30 | -0.23 | |
| 1882 | -0.0165 | -0.31 | -0.29 | 1881 |
| 1883 | -0.0213 | -0.33 | -0.34 | |
| 1884 | -0.0185 | -0.35 | -0.50 | |
| 1885 | -0.0125 | -0.37 | -0.46 | |
| 1886 | -0.0146 | -0.38 | -0.45 | |
| 1887 | -0.0181 | -0.40 | -0.49 | |
| 1888 | -0.0102 | -0.42 | -0.34 | |
| 1889 | -0.0024 | -0.42 | -0.23 | |
| 1890 | 0.0180 | -0.41 | -0.46 | |
| 1891 | 0.0231 | -0.39 | -0.37 | |
| 1892 | 0.0129 | -0.36 | -0.47 | |
| 1893 | 0.0041 | -0.36 | -0.44 | |
| 1894 | 0.0030 | -0.36 | -0.41 | |
| 1895 | 0.0115 | -0.35 | -0.38 | |
| 1896 | 0.0098 | -0.33 | -0.21 | |
| 1897 | 0.0001 | -0.33 | -0.22 | |
| 1898 | -0.0025 | -0.33 | -0.45 | |
| 1899 | 0.0000 | -0.34 | -0.30 | |
| 1900 | 0.0084 | -0.33 | -0.18 | 1900 |
| 1901 | -0.0043 | -0.32 | -0.22 | |
| 1902 | -0.0207 | -0.34 | -0.38 | |
| 1903 | -0.0141 | -0.36 | -0.46 | |
| 1904 | -0.0117 | -0.37 | -0.51 | |
| 1905 | -0.0235 | -0.39 | -0.35 | |
| 1906 | -0.0242 | -0.42 | -0.26 | |
| 1907 | -0.0105 | -0.44 | -0.42 | |
| 1908 | 0.0094 | -0.44 | -0.46 | |
| 1909 | 0.0024 | -0.42 | -0.35 | |
| 1910 | 0.0135 | -0.38 | -0.49 | 1910 |
| 1911 | -0.0131 | -0.39 | -0.51 | |
| 1912 | -0.0079 | -0.41 | -0.44 | |
| 1913 | 0.0111 | -0.41 | -0.40 | |
| 1914 | 0.0186 | -0.39 | -0.23 | |
| 1915 | 0.0244 | -0.37 | -0.16 | |
| 1916 | 0.0209 | -0.34 | -0.40 | |
| 1917 | 0.0172 | -0.32 | -0.50 | |
| 1918 | 0.0137 | -0.31 | -0.36 | |
| 1919 | 0.0064 | -0.29 | -0.30 | |
| 1920 | 0.0002 | -0.29 | -0.25 | |
| 1921 | 0.0124 | -0.29 | -0.21 | |
| 1922 | 0.0241 | -0.27 | -0.29 | 1922 |
| 1923 | 0.0154 | -0.24 | -0.27 | |
| 1924 | 0.0084 | -0.24 | -0.26 | |
| 1925 | 0.0167 | -0.23 | -0.23 | 1925 |
| 1926 | 0.0127 | -0.21 | -0.09 | |
| 1927 | 0.0046 | -0.20 | -0.19 | |
| 1928 | 0.0007 | -0.20 | -0.17 | |
| 1929 | 0.0101 | -0.18 | -0.35 | |
| 1930 | 0.0084 | -0.18 | -0.13 | |
| 1931 | 0.0094 | -0.17 | -0.07 | |
| 1932 | 0.0145 | -0.16 | -0.15 | |
| 1933 | 0.0167 | -0.14 | -0.28 | |
| 1934 | 0.0263 | -0.12 | -0.14 | |
| 1935 | 0.0275 | -0.09 | -0.17 | 1935 |
| 1936 | 0.0117 | -0.07 | -0.15 | |
| 1937 | 0.0105 | -0.06 | 0.02 | |
| 1938 | 0.0264 | -0.05 | 0.01 | |
| 1939 | 0.0265 | -0.01 | 0.01 | |
| 1940 | 0.0121 | 0.00 | 0.07 | 1940 |
| 1941 | 0.0110 | 0.01 | 0.06 | |
| 1942 | 0.0020 | 0.03 | 0.01 | |
| 1943 | -0.0099 | 0.02 | 0.04 | |
| 1944 | -0.0144 | 0.01 | 0.15 | |
| 1945 | -0.0130 | -0.01 | 0.02 | 1945 |
| 1946 | -0.0050 | -0.02 | 0.07 | |
| 1947 | 0.0042 | -0.02 | 0.00 | |
| 1948 | -0.0112 | -0.01 | 0.09 | |
| 1949 | -0.0198 | -0.02 | 0.11 | |
| 1950 | -0.0245 | -0.05 | 0.20 | |
| 1951 | -0.0072 | -0.07 | 0.03 | |
| 1952 | -0.0045 | -0.06 | 0.05 | |
| 1953 | 0.0043 | -0.06 | 0.11 | |
| 1954 | 0.0061 | -0.06 | 0.09 | |
| 1955 | 0.0133 | -0.05 | 0.16 | |
| 1956 | 0.0115 | -0.03 | 0.22 | |
| 1957 | 0.0006 | -0.03 | 0.01 | |
| 1958 | -0.0163 | -0.03 | 0.03 | |
| 1959 | -0.0181 | -0.06 | 0.00 | |
| 1960 | -0.0017 | -0.06 | 0.05 | |
| 1961 | 0.0121 | -0.06 | 0.03 | 1960 |
| 1962 | 0.0034 | -0.04 | 0.00 | |
| 1963 | -0.0041 | -0.05 | 0.04 | |
| 1964 | 0.0000 | -0.05 | 0.24 | |
| 1965 | -0.0055 | -0.05 | 0.14 | |
| 1966 | -0.0092 | -0.06 | 0.07 | |
| 1967 | -0.0017 | -0.07 | 0.06 | |
| 1968 | -0.0070 | -0.08 | 0.10 | |
| 1969 | -0.0044 | -0.08 | 0.04 | |
| 1970 | 0.0012 | -0.07 | 0.02 | |
| 1971 | 0.0019 | -0.08 | 0.15 | |
| 1972 | 0.0053 | -0.07 | 0.07 | |
| 1973 | 0.0053 | -0.07 | 0.06 | |
| 1974 | 0.0101 | -0.06 | 0.18 | |
| 1975 | 0.0156 | -0.05 | 0.12 | 1975 |
| 1976 | 0.0158 | -0.03 | 0.23 | |
| 1977 | 0.0178 | -0.02 | 0.06 | |
| 1978 | 0.0090 | 0.01 | 0.05 | 1978 |
| 1979 | 0.0065 | 0.00 | 0.03 | |
| 1980 | 0.0149 | 0.02 | 0.14 | |
| 1981 | 0.0255 | 0.03 | 0.19 | |
| 1982 | 0.0256 | 0.07 | 0.01 | |
| 1983 | 0.0147 | 0.08 | 0.18 | |
| 1984 | 0.0195 | 0.10 | 0.01 | |
| 1985 | 0.0187 | 0.12 | 0.01 | |
| 1986 | 0.0024 | 0.13 | 0.04 | |
| 1987 | 0.0078 | 0.14 | 0.22 | 1987 |
| 1988 | 0.0159 | 0.14 | 0.109 | |
| 1989 | 0.0253 | 0.17 | 0.298 | |
| 1990 | 0.0253 | 0.17 | 0.298 | 1990 |
| 1991 | 0.0232 | 0.19 | 0.295 | |
| 1992 | 0.0320 | 0.22 | 0.094 | |
| 1993 | 0.0194 | 0.26 | 0.135 | |
| 1994 | 0.0117 | 0.26 | 0.204 | |
| 1995 | 0.0168 | 0.26 | 0.23 | 1995 |
| 1996 | 0.0176 | 0.29 | 0.227 | |
| 1997 | 0.0299 | 0.31 | 0.378 | |
| 1998 | 0.0329 | 0.35 | 0.53 | 1998 |
| 1999 | 0.0329 | 0.38 | 0.395 | |
| 2000 | 0.0266 | 0.41 | 0.301 | 2000 |
| 2001 | 0.0245 | 0.43 | 0.453 | |
| 2002 | 0.0174 | 0.46 | 0.818 | |
| 2003 | 0.0032 | 0.47 | 0.158 | 2003 |
| 2004 | 0.0166 | 0.47 | 0.435 | |
| 2005 | 0.0244 | 0.50 | 0.584 | 2005 |
| 2006 | 0.0115 | 0.52 | 0.56 | |
| 2007 | 0.0042 | 0.52 | 0.561 | 2007 |
| 2008 | 0.0060 | 0.53 | 0.427 | |
| 2009 | 0.0193 | 0.54 | 0.551 | |
| 2010 | 0.0277 | 0.57 | 0.63 | 2010 |
| 2011 | 0.0220 | 0.59 | 0.493 | 2011 |
| 2012 | 0.0144 | 0.61 | 0.515 | 2012 |
| 2013 | 0.0150 | 0.62 | 0.549 | |
| 2014 | 0.0146 | 0.64 | 0.58 | |
| 2015 | 0.0061 | 0.65 | 0.759 | 2015 |
| 2016 | 0.0126 | 0.65 | 0.87 | 2016 |
| 2017 | 0.0247 | 0.67 | 0.734 | 2017 |
| 2018 | 0.0266 | 0.70 | 0.678 | 2018 |



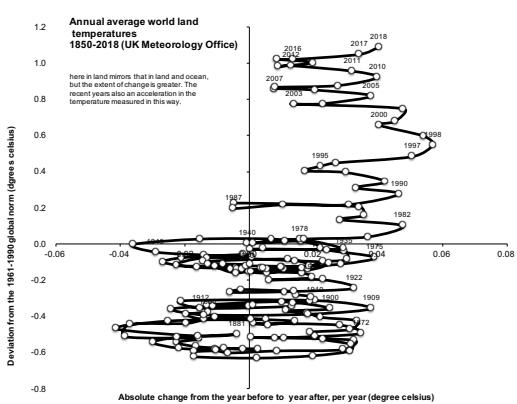
[Contents](#)

Annual average land temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1850-2018, (degrees celsius)

Source: Coverage bias in the HadCRUT4 temperature record, Kevin Cowan and Robert Way: http://www-users.york.ac.uk/~rdc3/papers/coverage2013/cru4_krig_v2_0_0.txt; 24 June 2019
Notes: The land temperature reconstruction is used for air temperatures over land and sea ice

Frequency: Yearly, End of period

| Observation date | Absolute change (degree celsius) | Average over 11 years (degree celsius) | Temperature anomaly (degree celsius) | Label |
|------------------|----------------------------------|--|--------------------------------------|-------|
| 1850 | -0.0127 | -0.38 | -0.55 | 1850 |
| 1851 | -0.0135 | -0.39 | -0.21 | |
| 1852 | -0.0141 | -0.42 | -0.39 | |
| 1853 | -0.0051 | -0.42 | -0.49 | |
| 1854 | -0.0105 | -0.41 | -0.23 | |
| 1855 | -0.0125 | -0.41 | -0.40 | |
| 1856 | -0.0371 | -0.45 | -0.47 | |
| 1857 | -0.0385 | -0.51 | -0.60 | |
| 1858 | -0.0155 | -0.52 | -0.43 | |
| 1859 | -0.0223 | -0.54 | -0.30 | |
| 1860 | -0.0165 | -0.57 | -0.77 | |
| 1861 | -0.0076 | -0.58 | -0.62 | |
| 1862 | -0.0117 | -0.58 | -0.86 | |
| 1863 | 0.0026 | -0.58 | -0.49 | |
| 1864 | -0.0107 | -0.58 | -0.73 | |
| 1865 | -0.0067 | -0.60 | -0.49 | |
| 1866 | -0.0085 | -0.59 | -0.50 | |
| 1867 | 0.0250 | -0.58 | -0.53 | |
| 1868 | 0.0327 | -0.53 | -0.58 | |
| 1869 | 0.0081 | -0.52 | -0.40 | |
| 1870 | 0.0004 | -0.52 | -0.57 | |
| 1871 | 0.0107 | -0.52 | -0.65 | |
| 1872 | 0.0347 | -0.50 | -0.55 | |
| 1873 | 0.0393 | -0.48 | -0.39 | |
| 1874 | 0.0014 | -0.44 | -0.33 | |
| 1875 | 0.0097 | -0.45 | -0.71 | |
| 1876 | 0.0141 | -0.43 | -0.50 | |
| 1877 | 0.0007 | -0.42 | -0.20 | |
| 1878 | -0.0253 | -0.43 | -0.02 | |
| 1879 | -0.0414 | -0.47 | -0.47 | |
| 1880 | -0.0108 | -0.51 | -0.40 | |
| 1881 | -0.0037 | -0.50 | -0.36 | 1881 |
| 1882 | -0.0223 | -0.52 | -0.54 | |
| 1883 | -0.0259 | -0.52 | -0.64 | |
| 1884 | 0.0220 | -0.58 | -0.85 | |
| 1885 | -0.0163 | -0.59 | -0.78 | |
| 1886 | -0.0173 | -0.60 | -0.61 | |
| 1887 | -0.0117 | -0.52 | -0.88 | |
| 1888 | 0.0024 | -0.63 | -0.56 | |
| 1889 | 0.0196 | -0.62 | -0.37 | |
| 1890 | 0.0312 | -0.55 | -0.60 | |
| 1891 | 0.0317 | -0.55 | -0.57 | |
| 1892 | 0.0229 | -0.53 | -0.65 | |
| 1893 | 0.0204 | -0.51 | -0.63 | |
| 1894 | 0.0187 | -0.48 | -0.60 | |
| 1895 | 0.0312 | -0.47 | -0.57 | |
| 1896 | 0.0336 | -0.43 | -0.38 | |
| 1897 | 0.0222 | -0.41 | -0.31 | |
| 1898 | 0.0179 | -0.38 | -0.40 | |
| 1899 | 0.0115 | -0.37 | -0.32 | |
| 1900 | 0.0251 | -0.36 | -0.20 | 1900 |
| 1901 | 0.0163 | -0.35 | -0.08 | |
| 1902 | -0.0129 | -0.34 | -0.35 | |
| 1903 | -0.0003 | -0.35 | -0.38 | |
| 1904 | 0.0011 | -0.34 | -0.51 | |
| 1905 | -0.0112 | -0.34 | -0.37 | |
| 1906 | -0.0244 | -0.36 | -0.15 | |
| 1907 | -0.0140 | -0.39 | -0.57 | |
| 1908 | 0.0185 | -0.39 | -0.40 | |
| 1909 | 0.0379 | -0.38 | -0.40 | |
| 1910 | 0.0204 | -0.31 | -0.37 | 1910 |
| 1911 | -0.0213 | -0.32 | -0.39 | |
| 1912 | -0.0191 | -0.38 | -0.43 | |
| 1913 | 0.0131 | -0.35 | -0.31 | |
| 1914 | 0.0136 | -0.33 | -0.02 | |
| 1915 | 0.0187 | -0.32 | -0.10 | |
| 1916 | 0.0191 | -0.29 | -0.38 | |
| 1917 | 0.0146 | -0.28 | -0.59 | |
| 1918 | 0.0193 | -0.26 | -0.46 | |
| 1919 | -0.0024 | -0.25 | -0.22 | |
| 1920 | -0.0091 | -0.27 | -0.27 | |
| 1921 | 0.0109 | -0.26 | -0.09 | |
| 1922 | 0.0058 | -0.25 | -0.25 | 1922 |
| 1923 | 0.0231 | -0.25 | -0.25 | |
| 1924 | 0.0060 | -0.20 | -0.19 | |
| 1925 | 0.0195 | -0.19 | -0.19 | 1925 |
| 1926 | 0.0163 | -0.18 | 0.03 | |
| 1927 | -0.0002 | -0.15 | -0.19 | |
| 1928 | 0.0055 | -0.16 | -0.08 | |
| 1929 | 0.0108 | -0.14 | -0.47 | |
| 1930 | 0.0057 | -0.14 | -0.39 | |
| 1931 | 0.0037 | -0.13 | 0.02 | |
| 1932 | 0.0163 | -0.13 | -0.02 | |
| 1933 | 0.0229 | -0.13 | -0.33 | |
| 1934 | 0.0305 | -0.09 | -0.05 | |
| 1935 | 0.0294 | -0.04 | -0.15 | 1935 |
| 1936 | 0.0042 | -0.03 | -0.11 | |
| 1937 | 0.0002 | -0.03 | 0.03 | |
| 1938 | 0.0221 | -0.03 | 0.17 | |
| 1939 | 0.0160 | 0.01 | 0.07 | |
| 1940 | -0.0005 | 0.00 | 0.06 | 1940 |
| 1941 | 0.0113 | 0.01 | 0.04 | |
| 1942 | 0.0070 | 0.03 | -0.01 | |
| 1943 | -0.0152 | 0.03 | 0.01 | |
| 1944 | -0.0209 | 0.00 | 0.13 | |
| 1945 | -0.0291 | -0.05 | -0.15 | 1945 |
| 1946 | -0.0140 | -0.06 | -0.06 | |
| 1947 | 0.0006 | -0.07 | 0.05 | |
| 1948 | -0.0017 | -0.06 | 0.01 | |
| 1949 | -0.0209 | -0.08 | -0.15 | |
| 1950 | -0.0269 | -0.10 | -0.40 | |
| 1951 | -0.0161 | -0.13 | -0.12 | |
| 1952 | -0.0041 | -0.13 | -0.09 | |
| 1953 | -0.0038 | -0.14 | 0.14 | |
| 1954 | -0.0002 | -0.14 | -0.17 | |
| 1955 | 0.0184 | -0.14 | -0.15 | |
| 1956 | 0.0248 | -0.10 | -0.47 | |
| 1957 | 0.0141 | -0.09 | -0.10 | |
| 1958 | -0.0129 | -0.08 | 0.00 | |
| 1959 | -0.0226 | -0.12 | -0.04 | |
| 1960 | -0.0011 | -0.12 | -0.17 | 1960 |
| 1961 | 0.0185 | -0.12 | 0.03 | |
| 1962 | 0.0120 | -0.08 | 0.00 | |
| 1963 | -0.0142 | -0.10 | 0.10 | |
| 1964 | -0.0083 | -0.11 | -0.34 | |
| 1965 | 0.0002 | -0.11 | -0.23 | |
| 1966 | -0.0126 | -0.11 | -0.15 | |
| 1967 | -0.0058 | -0.14 | -0.06 | |
| 1968 | -0.0107 | -0.12 | -0.24 | |
| 1969 | 0.0041 | -0.15 | -0.17 | |
| 1970 | 0.0043 | -0.13 | -0.05 | |
| 1971 | 0.0006 | -0.15 | -0.16 | |
| 1972 | 0.0103 | -0.13 | -0.28 | |
| 1973 | 0.0098 | -0.13 | 0.17 | |
| 1974 | 0.0284 | -0.11 | -0.30 | |
| 1975 | 0.0390 | -0.07 | -0.03 | 1975 |
| 1976 | 0.0241 | -0.03 | 0.12 | |
| 1977 | 0.0292 | -0.03 | 0.08 | |
| 1978 | 0.0156 | 0.02 | -0.06 | 1978 |
| 1979 | 0.0011 | 0.00 | -0.02 | |
| 1980 | 0.0171 | 0.03 | 0.24 | |
| 1981 | 0.0369 | 0.04 | 0.40 | |
| 1982 | 0.0476 | 0.10 | -0.08 | 1982 |
| 1983 | 0.0293 | 0.13 | 0.30 | |
| 1984 | 0.0357 | 0.16 | -0.05 | |
| 1985 | 0.0342 | 0.21 | -0.06 | |
| 1986 | 0.0068 | 0.23 | 0.11 | |
| 1987 | 0.0048 | 0.20 | 0.26 | 1987 |
| 1988 | 0.0105 | 0.22 | 0.45 | |
| 1989 | 0.0309 | 0.22 | 0.19 | |
| 1990 | 0.0460 | 0.28 | 0.51 | 1990 |
| 1991 | 0.0332 | 0.31 | 0.46 | |
| 1992 | 0.0422 | 0.34 | 0.08 | |
| 1993 | 0.0295 | 0.38 | 0.14 | |
| 1994 | 0.0173 | 0.40 | 0.31 | |
| 1995 | 0.0220 | 0.43 | 0.61 | 1995 |
| 1996 | 0.0268 | 0.45 | 0.30 | |
| 1997 | 0.0590 | 0.48 | 0.48 | 1997 |
| 1998 | 0.0570 | 0.55 | 0.82 | 1998 |
| 1999 | 0.0540 | 0.60 | 0.55 | |
| 2000 | 0.0403 | 0.66 | 0.47 | 2000 |
| 2001 | 0.0443 | 0.68 | 0.71 | |
| 2002 | 0.0479 | 0.75 | 0.84 | |
| 2003 | 0.0139 | 0.77 | 0.81 | 2003 |
| 2004 | 0.0225 | 0.78 | 0.86 | |
| 2005 | 0.0378 | 0.82 | 0.98 | 2005 |
| 2006 | 0.0204 | 0.85 | 0.84 | |
| 2007 | 0.0079 | 0.86 | 1.07 | 2007 |
| 2008 | 0.0360 | 0.87 | 0.78 | |
| 2009 | 0.0274 | 0.88 | 0.84 | |
| 2010 | 0.0398 | 0.92 | 1.03 | 2010 |
| 2011 | 0.0130 | 0.98 | 0.86 | |
| 2012 | 0.0130 | 0.99 | 0.81 | 2012 |
| 2013 | 0.0090 | 0.98 | 0.92 | |
| 2014 | 0.0200 | 1.00 | 0.91 | |
| 2015 | 0.0364 | 1.02 | 1.17 | |
| 2016 | 0.0138 | 1.02 | 1.35 | 2016 |
| 2017 | 0.0342 | 1.05 | 1.17 | 2017 |
| 2018 | 0.0402 | 1.09 | 1.02 | 2018 |



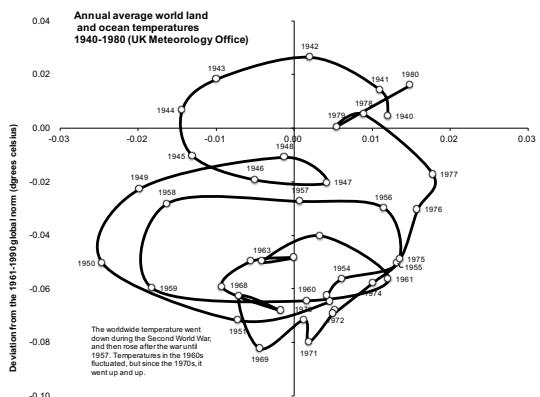
[Contents](#)

Annual average land and ocean temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1940-1980, (degrees celsius)

Source: Coverage bias in the HadCRUT4 temperature record, Kevin Cowtan and Robert Way; http://www-users.york.ac.uk/~kdc3/papers/coverage2013/had4_krig_annual_v2_0_0.txt; 24 June 2019

Frequency: Yearly, End of period

| Observation date | Absolute change (degree celsius) | Average over 11 years (degree celsius) | Temperature anomaly (degree celsius) | Label |
|------------------|----------------------------------|--|--------------------------------------|-------|
| 1850 | -0.0119 | -0.29 | -0.22 | 1850 |
| 1851 | -0.0188 | -0.30 | -0.22 | |
| 1852 | -0.0170 | -0.32 | -0.26 | |
| 1853 | -0.0067 | -0.34 | -0.32 | |
| 1854 | -0.0068 | -0.34 | -0.30 | |
| 1855 | -0.0100 | -0.35 | -0.26 | |
| 1856 | -0.0210 | -0.36 | -0.39 | |
| 1857 | -0.0223 | -0.39 | -0.49 | |
| 1858 | -0.0130 | -0.40 | -0.42 | |
| 1859 | -0.0109 | -0.42 | -0.36 | |
| 1860 | -0.0061 | -0.42 | -0.46 | |
| 1861 | -0.0012 | -0.43 | -0.49 | |
| 1862 | 0.0105 | -0.43 | -0.50 | |
| 1863 | 0.0145 | -0.41 | -0.39 | |
| 1864 | 0.0059 | -0.40 | -0.48 | |
| 1865 | 0.0051 | -0.40 | -0.34 | |
| 1866 | 0.0122 | -0.39 | -0.33 | |
| 1867 | 0.0208 | -0.37 | -0.36 | |
| 1868 | 0.0132 | -0.35 | -0.28 | |
| 1869 | 0.0048 | -0.35 | -0.31 | |
| 1870 | 0.0025 | -0.34 | -0.34 | |
| 1871 | 0.0082 | -0.34 | -0.36 | |
| 1872 | 0.0270 | -0.32 | -0.32 | 1872 |
| 1873 | 0.0175 | -0.29 | -0.30 | |
| 1874 | 0.0017 | -0.28 | -0.39 | |
| 1875 | 0.0061 | -0.28 | -0.38 | |
| 1876 | 0.0087 | -0.27 | -0.39 | |
| 1877 | 0.0023 | -0.27 | -0.01 | |
| 1878 | -0.0103 | -0.27 | 0.00 | |
| 1879 | -0.0136 | -0.29 | -0.26 | |
| 1880 | -0.0079 | -0.29 | -0.29 | |
| 1881 | -0.0082 | -0.30 | -0.23 | 1881 |
| 1882 | -0.0165 | -0.31 | -0.29 | |
| 1883 | -0.0213 | -0.33 | -0.34 | |
| 1884 | -0.0185 | -0.35 | -0.50 | |
| 1885 | -0.0125 | -0.37 | -0.46 | |
| 1886 | -0.0146 | -0.38 | -0.45 | |
| 1887 | -0.0181 | -0.40 | -0.49 | |
| 1888 | -0.0102 | -0.42 | -0.34 | |
| 1889 | -0.0224 | -0.42 | -0.23 | |
| 1890 | 0.0180 | -0.41 | -0.46 | |
| 1891 | 0.0231 | -0.39 | -0.37 | |
| 1892 | 0.0129 | -0.36 | -0.47 | |
| 1893 | 0.0041 | -0.36 | -0.44 | |
| 1894 | 0.0030 | -0.36 | -0.41 | |
| 1895 | 0.0115 | -0.35 | -0.38 | |
| 1896 | 0.0098 | -0.33 | -0.21 | |
| 1897 | 0.0001 | -0.33 | -0.22 | |
| 1898 | -0.0025 | -0.33 | -0.45 | |
| 1899 | 0.0000 | -0.34 | -0.30 | |
| 1900 | 0.0084 | -0.33 | -0.18 | 1900 |
| 1901 | -0.0043 | -0.32 | -0.22 | |
| 1902 | -0.0207 | -0.34 | -0.38 | |
| 1903 | -0.0141 | -0.36 | -0.46 | |
| 1904 | -0.0117 | -0.37 | -0.51 | |
| 1905 | -0.0235 | -0.39 | -0.35 | |
| 1906 | -0.0242 | -0.42 | -0.26 | |
| 1907 | -0.0105 | -0.44 | -0.42 | |
| 1908 | 0.0084 | -0.44 | -0.46 | |
| 1909 | 0.0024 | -0.42 | -0.35 | 1909 |
| 1910 | 0.0135 | -0.38 | -0.49 | 1910 |
| 1911 | -0.0131 | -0.39 | -0.51 | |
| 1912 | -0.0079 | -0.41 | -0.44 | 1912 |
| 1913 | 0.0111 | -0.41 | -0.40 | |
| 1914 | 0.0186 | -0.39 | -0.23 | |
| 1915 | 0.0244 | -0.37 | -0.16 | |
| 1916 | 0.0229 | -0.34 | -0.40 | |
| 1917 | 0.0172 | -0.32 | -0.50 | |
| 1918 | 0.0137 | -0.31 | -0.36 | |
| 1919 | 0.0064 | -0.29 | -0.30 | |
| 1920 | 0.0002 | -0.29 | -0.29 | |
| 1921 | 0.0124 | -0.29 | -0.21 | |
| 1922 | 0.0241 | -0.27 | -0.29 | 1922 |
| 1923 | 0.0154 | -0.24 | -0.27 | |
| 1924 | 0.0084 | -0.24 | -0.26 | |
| 1925 | 0.0167 | -0.23 | -0.23 | 1925 |
| 1926 | 0.0127 | -0.21 | -0.09 | |
| 1927 | 0.0046 | -0.20 | -0.19 | |
| 1928 | 0.0087 | -0.20 | -0.17 | |
| 1929 | 0.0101 | -0.18 | -0.35 | |
| 1930 | 0.0084 | -0.18 | -0.13 | |
| 1931 | 0.0094 | -0.17 | -0.07 | |
| 1932 | 0.0145 | -0.16 | -0.15 | |
| 1933 | 0.0167 | -0.14 | -0.28 | |
| 1934 | 0.0263 | -0.12 | -0.14 | |
| 1935 | 0.0275 | -0.09 | -0.17 | 1935 |
| 1936 | 0.0117 | -0.07 | -0.15 | |
| 1937 | 0.0105 | -0.06 | -0.02 | |
| 1938 | 0.0264 | -0.05 | 0.01 | |
| 1939 | 0.0265 | -0.01 | -0.01 | |
| 1940 | 0.0121 | 0.00 | -0.07 | |
| 1941 | 0.0110 | 0.01 | 0.08 | 1940 |
| 1942 | 0.0020 | 0.03 | 0.01 | 1941 |
| 1943 | -0.0099 | 0.02 | 0.04 | 1942 |
| 1944 | -0.0144 | 0.01 | 0.15 | 1943 |
| 1945 | -0.0130 | -0.01 | 0.02 | 1944 |
| 1946 | -0.0050 | -0.02 | 0.07 | 1945 |
| 1947 | 0.0042 | -0.02 | 0.00 | 1946 |
| 1948 | -0.0112 | -0.01 | 0.09 | 1947 |
| 1949 | -0.0198 | -0.02 | 0.11 | 1948 |
| 1950 | -0.0245 | -0.05 | 0.20 | 1949 |
| 1951 | -0.0072 | -0.07 | 0.03 | 1950 |
| 1952 | -0.0045 | -0.06 | 0.05 | 1951 |
| 1953 | 0.0043 | -0.06 | 0.11 | 1952 |
| 1954 | 0.0061 | -0.06 | 0.09 | 1953 |
| 1955 | 0.0133 | -0.05 | 0.16 | 1954 |
| 1956 | 0.0115 | -0.03 | 0.22 | 1955 |
| 1957 | 0.0008 | -0.03 | 0.01 | 1956 |
| 1958 | -0.0163 | -0.03 | 0.03 | 1957 |
| 1959 | -0.0181 | -0.06 | 0.00 | 1958 |
| 1960 | -0.0017 | -0.06 | -0.05 | 1959 |
| 1961 | 0.0121 | -0.06 | 0.03 | 1960 |
| 1962 | 0.0034 | -0.04 | 0.00 | 1961 |
| 1963 | -0.0041 | -0.05 | 0.04 | 1962 |
| 1964 | 0.0000 | -0.05 | 0.24 | 1963 |
| 1965 | -0.0055 | -0.05 | 0.14 | |
| 1966 | -0.0092 | -0.06 | 0.07 | |
| 1967 | -0.0017 | -0.07 | 0.06 | |
| 1968 | -0.0070 | -0.08 | 0.10 | 1967 |
| 1969 | -0.0044 | -0.08 | 0.04 | 1968 |
| 1970 | 0.0012 | -0.07 | 0.02 | 1969 |
| 1971 | 0.0019 | -0.08 | 0.15 | 1970 |
| 1972 | 0.0053 | -0.07 | 0.07 | 1971 |
| 1973 | 0.0053 | -0.07 | 0.06 | 1972 |
| 1974 | 0.0101 | -0.06 | 0.18 | 1973 |
| 1975 | 0.0156 | -0.05 | 0.12 | 1974 |
| 1976 | 0.0158 | -0.03 | 0.23 | 1975 |
| 1977 | 0.0178 | -0.02 | 0.06 | 1976 |
| 1978 | 0.0090 | 0.01 | 0.05 | 1977 |
| 1979 | 0.0055 | 0.00 | 0.03 | 1978 |
| 1980 | 0.0149 | 0.02 | 0.14 | 1979 |
| 1981 | 0.0255 | 0.03 | 0.19 | 1980 |
| 1982 | 0.0256 | 0.07 | 0.01 | |
| 1983 | 0.0147 | 0.08 | 0.18 | |
| 1984 | 0.0195 | 0.10 | 0.01 | |
| 1985 | 0.0187 | 0.12 | 0.01 | |
| 1986 | 0.0024 | 0.13 | 0.04 | |
| 1987 | 0.0024 | 0.13 | 0.17 | 1987 |
| 1988 | 0.0078 | 0.14 | 0.22 | |
| 1989 | 0.0159 | 0.14 | 0.109 | |
| 1990 | 0.0253 | 0.17 | 0.298 | 1990 |
| 1991 | 0.0232 | 0.19 | 0.295 | |
| 1992 | 0.0320 | 0.22 | 0.094 | |
| 1993 | 0.0194 | 0.26 | 0.135 | |
| 1994 | 0.0117 | 0.26 | 0.204 | |
| 1995 | 0.0169 | 0.26 | 0.23 | 1995 |
| 1996 | 0.0176 | 0.29 | 0.227 | |
| 1997 | 0.0299 | 0.31 | 0.378 | 1997 |
| 1998 | 0.0329 | 0.35 | 0.53 | 1998 |
| 1999 | 0.0329 | 0.38 | 0.395 | |
| 2000 | 0.0266 | 0.41 | 0.301 | 2000 |
| 2001 | 0.0245 | 0.43 | 0.453 | |
| 2002 | 0.0174 | 0.46 | 0.818 | |
| 2003 | 0.0032 | 0.47 | 0.418 | 2003 |
| 2004 | 0.0166 | 0.47 | 0.435 | |
| 2005 | 0.0244 | 0.50 | 0.584 | 2005 |
| 2006 | 0.0115 | 0.52 | 0.52 | |
| 2007 | 0.0042 | 0.52 | 0.561 | 2007 |
| 2008 | 0.0060 | 0.53 | 0.427 | |
| 2009 | 0.0193 | 0.54 | 0.551 | |
| 2010 | 0.0277 | 0.57 | 0.63 | 2010 |
| 2011 | 0.0220 | 0.59 | 0.493 | 2011 |
| 2012 | 0.0144 | 0.61 | 0.515 | 2012 |
| 2013 | 0.0150 | 0.62 | 0.549 | |
| 2014 | 0.0146 | 0.64 | 0.58 | |
| 2015 | 0.0061 | 0.65 | 0.759 | 2015 |
| 2016 | 0.0126 | 0.65 | 0.87 | 2016 |
| 2017 | 0.0247 | 0.67 | 0.734 | 2017 |
| 2018 | 0.0266 | 0.70 | 0.678 | 2018 |



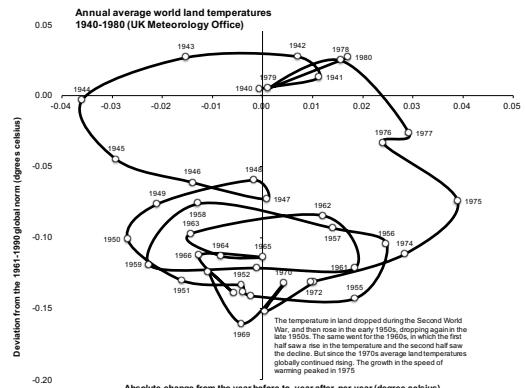
[Contents](#)

Annual average land temperatures, base period 1961-1990, with the 11-year smooth, worldwide, 1940-1980, (degrees celsius)

Source: Coverage bias in the HadCRUT4 temperature record, Kevin Cowan and Robert Way: http://www-users.york.ac.uk/~kdc3/papers/coverage2013/cru4_krig_v2_0.txt; 24 June 2019
Notes: The land temperature reconstruction is used for air temperatures over land and sea ice

Frequency: Yearly, End of period

| Observation date | Absolute change (degree celsius) | Average over 11 years (degree celsius) | Temperature anomaly (degree celsius) | Label |
|------------------|----------------------------------|--|--------------------------------------|-------|
| 1850 | -0.0127 | -0.38 | -0.55 | 1850 |
| 1851 | -0.0135 | -0.39 | -0.21 | |
| 1852 | -0.0141 | -0.42 | -0.39 | |
| 1853 | 0.0051 | -0.42 | -0.49 | |
| 1854 | -0.0109 | -0.41 | -0.23 | |
| 1855 | -0.0125 | -0.41 | -0.40 | |
| 1856 | -0.0371 | -0.45 | -0.47 | |
| 1857 | -0.0385 | -0.51 | -0.60 | |
| 1858 | -0.0155 | -0.52 | -0.43 | |
| 1859 | -0.0203 | -0.54 | -0.30 | |
| 1860 | -0.0165 | -0.57 | -0.77 | |
| 1861 | -0.0076 | -0.58 | -0.62 | |
| 1862 | -0.0017 | -0.58 | -0.46 | |
| 1863 | 0.0026 | -0.58 | -0.49 | |
| 1864 | -0.0107 | -0.58 | -0.73 | |
| 1865 | -0.0067 | -0.60 | -0.49 | |
| 1866 | -0.0085 | -0.59 | -0.50 | |
| 1867 | 0.0250 | -0.58 | -0.53 | |
| 1868 | 0.0327 | -0.53 | -0.58 | |
| 1869 | 0.0081 | -0.52 | -0.40 | |
| 1870 | 0.0004 | -0.52 | -0.57 | |
| 1871 | 0.0107 | -0.52 | -0.65 | |
| 1872 | 0.0347 | -0.50 | -0.55 | |
| 1873 | 0.0393 | -0.48 | -0.39 | |
| 1874 | 0.0014 | -0.44 | -0.33 | |
| 1875 | 0.0097 | -0.45 | -0.71 | |
| 1876 | 0.0141 | -0.43 | -0.50 | |
| 1877 | 0.0007 | -0.42 | -0.20 | |
| 1878 | -0.0253 | -0.43 | -0.02 | |
| 1879 | -0.0414 | -0.47 | -0.47 | |
| 1880 | -0.0108 | -0.51 | -0.40 | |
| 1881 | -0.0037 | -0.50 | -0.36 | 1881 |
| 1882 | -0.0223 | -0.52 | -0.54 | |
| 1883 | -0.0259 | -0.52 | -0.64 | |
| 1884 | 0.0220 | -0.58 | -0.58 | |
| 1885 | -0.0103 | -0.59 | -0.78 | |
| 1886 | -0.0173 | -0.60 | -0.61 | |
| 1887 | -0.0171 | -0.52 | -0.88 | |
| 1888 | 0.0242 | -0.63 | -0.56 | |
| 1889 | 0.0196 | -0.62 | -0.37 | |
| 1890 | 0.0312 | -0.59 | -0.60 | |
| 1891 | 0.0317 | -0.55 | -0.57 | |
| 1892 | 0.0229 | -0.53 | -0.65 | |
| 1893 | 0.0204 | -0.51 | -0.63 | |
| 1894 | 0.0187 | -0.48 | -0.60 | |
| 1895 | 0.0312 | -0.47 | -0.57 | |
| 1896 | 0.0336 | -0.43 | -0.38 | |
| 1897 | 0.0222 | -0.41 | -0.31 | |
| 1898 | 0.0179 | -0.38 | -0.40 | |
| 1899 | 0.0115 | -0.37 | -0.32 | |
| 1900 | 0.0251 | -0.36 | -0.20 | 1900 |
| 1901 | 0.0163 | -0.35 | -0.08 | |
| 1902 | -0.0129 | -0.34 | -0.35 | |
| 1903 | -0.0003 | -0.35 | -0.38 | |
| 1904 | 0.0011 | -0.34 | -0.51 | |
| 1905 | -0.0112 | -0.34 | -0.37 | |
| 1906 | -0.0244 | -0.36 | -0.15 | |
| 1907 | -0.0140 | -0.39 | -0.57 | |
| 1908 | 0.0185 | -0.39 | -0.40 | |
| 1909 | 0.0379 | -0.38 | -0.40 | 1909 |
| 1910 | 0.0204 | -0.31 | -0.37 | 1910 |
| 1911 | -0.0213 | -0.32 | -0.39 | |
| 1912 | -0.0191 | -0.38 | -0.43 | |
| 1913 | 0.0131 | -0.35 | -0.31 | |
| 1914 | 0.0136 | -0.33 | -0.02 | |
| 1915 | 0.0187 | -0.32 | -0.04 | |
| 1916 | 0.0191 | -0.29 | -0.38 | |
| 1917 | 0.0146 | -0.28 | -0.59 | |
| 1918 | 0.0138 | -0.26 | -0.46 | |
| 1919 | -0.0004 | -0.25 | -0.22 | |
| 1920 | -0.0091 | -0.27 | -0.27 | |
| 1921 | 0.0109 | -0.26 | -0.09 | |
| 1922 | 0.0058 | -0.25 | -0.25 | |
| 1923 | 0.0231 | -0.25 | -0.25 | 1922 |
| 1924 | 0.0060 | -0.20 | -0.19 | |
| 1925 | 0.0195 | -0.19 | -0.19 | |
| 1926 | 0.0163 | -0.18 | 0.03 | |
| 1927 | -0.0002 | -0.15 | -0.19 | |
| 1928 | 0.0055 | -0.16 | -0.08 | |
| 1929 | 0.0108 | -0.14 | -0.47 | |
| 1930 | 0.0057 | -0.14 | -0.09 | |
| 1931 | 0.0037 | -0.13 | 0.02 | |
| 1932 | 0.0163 | -0.13 | -0.02 | |
| 1933 | 0.0229 | -0.13 | -0.33 | |
| 1934 | 0.0305 | -0.09 | -0.05 | |
| 1935 | 0.0294 | -0.04 | -0.15 | 1935 |
| 1936 | 0.0042 | -0.03 | -0.11 | |
| 1937 | 0.0002 | -0.03 | 0.03 | |
| 1938 | 0.0221 | -0.03 | 0.17 | |
| 1939 | 0.0160 | 0.01 | 0.07 | |
| 1940 | -0.0005 | 0.00 | 0.06 | 1940 |
| 1941 | 0.0113 | 0.01 | 0.04 | 1941 |
| 1942 | 0.0070 | 0.03 | -0.01 | 1942 |
| 1943 | -0.0152 | 0.03 | 0.01 | 1943 |
| 1944 | -0.0209 | 0.00 | 0.13 | 1944 |
| 1945 | -0.0291 | -0.05 | -0.15 | 1945 |
| 1946 | -0.0140 | -0.06 | -0.06 | 1946 |
| 1947 | -0.0006 | -0.07 | 0.05 | 1947 |
| 1948 | -0.0017 | -0.06 | 0.01 | 1948 |
| 1949 | -0.0209 | -0.08 | -0.15 | 1949 |
| 1950 | -0.0269 | -0.10 | -0.40 | 1950 |
| 1951 | -0.0161 | -0.12 | -0.12 | 1951 |
| 1952 | -0.0041 | -0.13 | -0.09 | 1952 |
| 1953 | -0.0038 | -0.14 | 0.14 | 1953 |
| 1954 | -0.0002 | -0.14 | -0.17 | 1954 |
| 1955 | 0.0184 | -0.14 | -0.15 | 1955 |
| 1956 | 0.0248 | -0.10 | -0.47 | 1956 |
| 1957 | 0.0141 | -0.09 | -0.10 | 1957 |
| 1958 | -0.0129 | -0.08 | 0.00 | 1958 |
| 1959 | -0.0226 | -0.12 | -0.04 | 1959 |
| 1960 | -0.0011 | -0.12 | -0.17 | 1960 |
| 1961 | 0.0185 | -0.12 | 0.03 | 1961 |
| 1962 | 0.0120 | -0.08 | 0.00 | 1962 |
| 1963 | -0.0142 | -0.10 | 0.10 | 1963 |
| 1964 | -0.0083 | -0.11 | -0.34 | 1964 |
| 1965 | 0.0002 | -0.11 | -0.23 | 1965 |
| 1966 | -0.0126 | -0.11 | -0.15 | 1966 |
| 1967 | -0.0058 | -0.14 | -0.06 | 1967 |
| 1968 | -0.0107 | -0.12 | -0.24 | 1968 |
| 1969 | -0.0041 | -0.12 | -0.17 | 1969 |
| 1970 | 0.0043 | -0.13 | -0.05 | 1970 |
| 1971 | 0.0006 | -0.15 | -0.16 | 1971 |
| 1972 | -0.0103 | -0.13 | -0.26 | 1972 |
| 1973 | 0.0098 | -0.13 | 0.17 | 1973 |
| 1974 | 0.0284 | -0.11 | -0.30 | 1974 |
| 1975 | 0.0390 | -0.07 | -0.03 | 1975 |
| 1976 | 0.0241 | -0.03 | -0.12 | 1976 |
| 1977 | 0.0292 | -0.03 | 0.08 | 1977 |
| 1978 | 0.0156 | 0.02 | -0.06 | 1978 |
| 1979 | 0.0191 | 0.00 | -0.02 | 1979 |
| 1980 | 0.0171 | 0.03 | 0.24 | 1980 |
| 1981 | 0.0369 | 0.04 | 0.40 | 1982 |
| 1982 | 0.0476 | 0.10 | -0.08 | |
| 1983 | 0.0393 | 0.13 | 0.30 | |
| 1984 | 0.0357 | 0.16 | -0.05 | |
| 1985 | 0.0342 | 0.21 | -0.06 | |
| 1986 | 0.0048 | 0.23 | 0.11 | |
| 1987 | 0.0048 | 0.20 | 0.26 | 1987 |
| 1988 | 0.0105 | 0.22 | 0.45 | |
| 1989 | 0.0309 | 0.22 | 0.19 | |
| 1990 | 0.0440 | 0.28 | 0.51 | 1990 |
| 1991 | 0.0332 | 0.31 | 0.46 | |
| 1992 | 0.0422 | 0.34 | 0.08 | |
| 1993 | 0.0295 | 0.38 | 0.14 | |
| 1994 | 0.0173 | 0.40 | 0.31 | |
| 1995 | 0.0220 | 0.43 | 0.61 | 1995 |
| 1996 | 0.0268 | 0.45 | 0.30 | |
| 1997 | 0.0590 | 0.48 | 0.48 | 1997 |
| 1998 | 0.0570 | 0.55 | 0.82 | 1998 |
| 1999 | 0.0540 | 0.60 | 0.55 | |
| 2000 | 0.0403 | 0.66 | 0.47 | 2000 |
| 2001 | 0.0443 | 0.68 | 0.71 | |
| 2002 | 0.0479 | 0.75 | 0.84 | |
| 2003 | 0.0139 | 0.77 | 0.81 | 2003 |
| 2004 | 0.0225 | 0.78 | 0.86 | |
| 2005 | 0.0378 | 0.82 | 0.98 | 2005 |
| 2006 | 0.0204 | 0.85 | 0.84 | |
| 2007 | 0.0079 | 0.86 | 1.07 | 2007 |
| 2008 | 0.0360 | 0.87 | 0.78 | |
| 2009 | 0.0274 | 0.88 | 0.84 | |
| 2010 | 0.0398 | 0.92 | 1.03 | 2010 |
| 2011 | 0.0130 | 0.99 | 0.81 | 2011 |
| 2012 | 0.0090 | 0.98 | 0.92 | 2012 |
| 2013 | 0.0200 | 1.00 | 0.91 | |
| 2014 | 0.0084 | 1.02 | 1.17 | |
| 2015 | 0.0136 | 1.02 | 1.35 | 2016 |
| 2016 | 0.0342 | 1.05 | 1.17 | 2017 |
| 2017 | 0.0402 | 1.09 | 1.02 | 2018 |



The temperatures in land dropped during the Second World War, and then rose in the early 1950s, dropping again in the late 1960s. The same went for the 1960s, in which the first half saw a rise and the second half saw a fall. The same happened in the 1970s, with the first half seeing a rise and the second half seeing a fall. But since the 1970s average land temperatures globally have been rising. The growth in the speed of

The temperatures in land dropped during the Second World War, and then rose in the early 1950s, dropping again in the late 1960s. The same went for the 1960s, in which the first half saw a rise and the second half saw a fall. The same happened in the 1970s, with the first half seeing a rise and the second half seeing a fall. But since the 1970s average land temperatures globally have been rising. The growth in the speed of