



Frost and warm days trend assessment, 1972–2016

Title	Frost and warm days trend assessment, 1972–2016
Publisher	New Zealand's Environment Reporting Series: The Ministry for the Environment and Statistics New Zealand
Description	<p>The number of frost and warm days changes from year to year in response to climate variation, such as the warming pattern induced by El Niño. Climate models project we may experience fewer cold and more warm extremes in the future. Changes in the number of frost and warm days can affect agriculture, recreation, and our behaviour, for example, what we do to keep safe on icy roads or whether to use air conditioning to keep cool. A frost day is when the minimum temperature recorded is below 0 degrees Celsius. It refers to a temperature measured in an instrument screen 1.2m above the ground rather than a 'ground frost'. We define a warm day as having a maximum recorded temperature above 25 degrees Celsius. The threshold of 25 degrees Celsius is chosen to represent days where action might be taken to keep cool (eg turn air conditioning on). This dataset gives the trend in frost and warm days for New Zealand, the North and South Islands, and for all 30 sites. For frost days we have used calendar years. For warm days we have used growing season (July 1 – June 30 of the following year). Trend direction was assessed using the Theil-Sen estimator and the Two One-Sided Test (TOST) for equivalence at the 95% confidence level. More information on this dataset and how it relates to our Environmental reporting indicators and topics can be found in the attached data quality pdf.</p>
Source	National Institute for Water and Atmospheric Research
Rights	Creative Commons Attribution 4.0 New Zealand
Rights	Attribution 4.0 International
Rights	http://creativecommons.org/licenses/by/4.0/
Coverage	1972–2016: Auckland, Blenheim, Christchurch, Dannevirke, Dunedin, Gisborne, Gore, Hamilton, Hokitika, Invercargill, Kerikeri (since 1982), Lake Tekapo, Masterton (since 1993), Milford Sound, Napier, Nelson, New Plymouth, Queenstown, Reefton, Rotorua, Tara Hills, Taumarunui, Taupo (since 1976), Tauranga, Timaru, Waiouru, Wellington, Whanganui, Whangaparaoa (since 2000) and Whangarei.
Identifier	https://data.mfe.govt.nz/table/89388-frost-and-warm-days-trend-assessment-19722016/
Identifier	AC17/018
Type	Dataset
Language	eng-nz
Subject	temperature, climate, climate variability, Environmental reporting series: Our atmosphere and climate 2017