



Growing degree days trend assessment, for New Zealand, the North Island, and the South Island, 1972/3–2015/6

Title	Growing degree days trend assessment, for New Zealand, the North Island, and the South Island, 1972/3–2015/6
Publisher	New Zealand's Environment Reporting Series: The Ministry for the Environment and Statistics New Zealand
Description	<p>Growing degree days (GDD) measures the amount of warmth available for plant and insect growth and can be used to predict when flowers will bloom and crops and insects will mature. GDD counts the total number of degrees Celsius each day is above a threshold temperature. In this report we used 10 degrees Celsius. Increased GDD means that plants and insects reach maturity faster, provided that other conditions necessary for growth are favourable, such as sufficient moisture and nutrients. As a measure of temperature, GDD experiences short-term changes in response to climate variations, such as El Niño, and in the longer-term is affected by our warming climate. Growing degree days (GDD) counts the number of days that are warmer than a threshold temperature (Tbase) in a year. GDD is calculated by subtracting the Tbase from the average daily temperature (maximum plus minimum temperature divided by two). If the average daily temperature is less than Tbase the GDD for that day is assigned a value of zero. This dataset gives the trend in GDD over growing seasons (July 1 – June 30 of the following year) for New Zealand and the North and South Islands. 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	NIWA
Rights	Creative Commons Attribution 4.0 New Zealand
Rights	Attribution 4.0 International
Rights	http://creativecommons.org/licenses/by/4.0/
Coverage	1972/3–2015/6: 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/89476-growing-degree-days-trend-assessment-for-new-zealand-the-north-island-and-the-south-island-1972-32015-6/
Identifier	AC17/086
Type	Dataset
Language	eng-nz

Subject

temperature, climate change, climate variability, Environmental reporting series: Our atmosphere and climate 2017