



## Annual rainfall Units: percentage of normal, 1976

### Title

Annual rainfall Units: percentage of normal, 1976

### Creator

Environmental Reporting, Ministry for the Environment and Statistics New Zealand

### Date

2015-10-21

### Description

"Annual rainfall is the total accumulated rain over one year. Rain is vital for life, including plant growth, drinking water, river ecosystem health, and sanitation. Floods and droughts affect our environment, economy, and recreational opportunities. This layer shows the annual rainfall as a percentage of normal across New Zealand for 1976 as part of the data series for years 1972 to 2013. Annual rainfall is the total accumulated rain over one year. It is estimated from the daily rainfall estimates of the Virtual Climate Station Network (NIWA). 'Normal' is defined as the average annual rainfall from 1972–2013. This dataset relates to the ""Annual average rainfall"" measure on the Environmental Indicators, Te taiao Aotearoa website. Geometry: raster catalogue Unit: percent

### Source

Source: National Institute for Water and Atmospheric Research Method: "Annual rainfall Units: percentage of normal was derived from annual rainfall data. Units: percentage of normal was calculated by dividing the annual rainfall for a particular year/the average annual rainfall for all years from 1972–2013. Annual rainfall data records the total accumulated rainfall over a year. It is estimated from the daily rainfall estimates of the Virtual Climate Station Network (NIWA). Virtual climate station estimates are produced every day, for every 25km<sup>2</sup> around the country. They use a statistical model to estimate the values between observations made at actual climate stations. This model uses information such as the pattern of annual rainfall to help with the estimations. (NIWA, Tait et al 2005; Tait et al 2006, Tait et al 2012). The New Zealand precipitation values in the Water Physical Stock – surface water components show the total precipitation. The maps in this case study highlight spatial and time variations. The accuracy of the data source is of high quality. References: NIWA (nd). Virtual climate station data and products. Accessed 3 June 2015 from [www.niwa.co.nz](http://www.niwa.co.nz). Tait, A, Henderson, R, Turner, R, & Zheng, XG (2006). Thin plate smoothing spline interpolation of daily rainfall for New Zealand using a climatological rainfall surface. *International Journal of Climatology*, 26(14), 2097–2115. Available from <http://onlinelibrary.wiley.com>. Tait, A, Sturman, J, & Clark, M (2012). An assessment of the accuracy of interpolated daily rainfall for New Zealand. *Journal of Hydrology (New Zealand)*, 51(1), 25–44. Tait, A, & Turner, R (2005). Generating multiyear gridded daily rainfall over New Zealand. *Journal of Applied Meteorology*, 44(9), 1315–1323. Available from <http://journals.ametsoc.org>."

### Coverage

-47.5566512869 164.373835631 -33.826801176 -178.368273496

### Identifier

<https://data.mfe.govt.nz/layer/52945-annual-rainfall-units-percentage-of-normal-1976/>

Language

| eng

Subject

| environment

Subject

| New Zealand

Subject

| CLIMATE-AND-WEATHER

Subject

| CLIMATE-AND-WEATHER-Rainfall