



# Climate Change: Weather vs. Climate One Pager

## Background and concepts

Source: [NASA - What's the Difference Between Weather and Climate?](#)

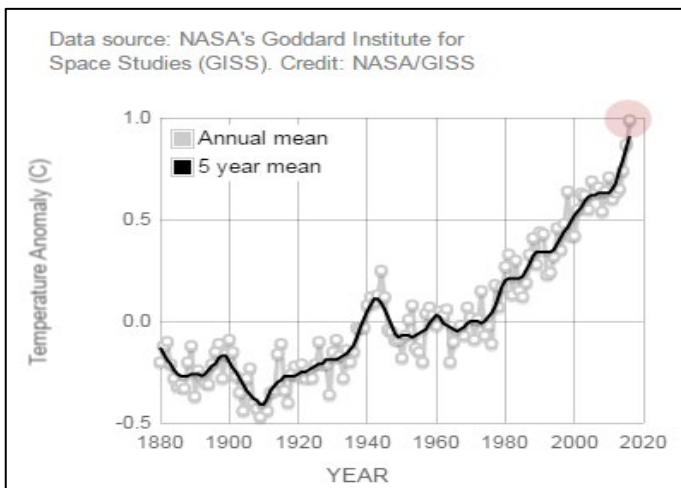
**Weather** consists of the short-term (minutes to months) changes in the atmosphere. Most people think of weather in terms of temperature, humidity, precipitation, cloudiness, brightness, visibility, wind, and atmospheric pressure, as in high and low pressure."

Look at the current [7 Day Weather Forecast](#) for locations around Saskatchewan.



**Climate** is the description of the long-term pattern of weather in a particular area. Some scientists define climate as the average weather for a particular region and time period, usually taken over 30 years...They're looking at averages of precipitation, temperature, humidity, sunshine, wind velocity, phenomena such as fog, frost, and hail storms, and other measures of the weather that occur over a long period in a particular place."

Look at NASA's GISS's [Global Land-Ocean Temperature Index](#) and time series map showing global temperature differences from 1884 and 2022.



**Climate change** is a long-term shift in weather conditions identified by changes in temperature, precipitation, winds, and other indicators. Climate change can involve both changes in average conditions and changes in variability, including, for example, extreme events.

Source: [Government of Canada: Causes of climate change](#)

Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or changes in land use. **Anthropogenic** means the product of human actions.

Source: [IPCC – SPECIAL REPORT: GLOBAL WARMING OF 1.5 °C Ch 00 Annex I: Glossary](#)