

Weather vs. Climate

Weather is defined as the general condition of the atmosphere at a particular time and place, to the degree that it is hot or cold, wet or dry, calm or stormy, clear or cloudy. Weather generally refers to the day-to-day temperature and precipitation activity.

Meteorology is the study of weather, weather phenomena, and weather forecasting. It is an ancient practice, but has only become a rigorous science in the last two hundred years or so.

In general, describing the weather consists of two types of observations: qualitative and quantitative.

Qualitative observations are those that are generally descriptive in nature, but do not include any kind of measurement. For example, if you said it was “sort of warm” today, that would be a qualitative observation. Qualitative observations are very subjective; they are dependent on each person’s perception of the weather.

Quantitative observations involve actual measurements. For example, if you said the temperature was 10 degrees Celsius today, that would be a quantitative observation. Quantitative observations are much less dependent on each person’s perceptions.

Climate is defined as the set of prevailing or average weather conditions of a place over a long period of time (usually several years, or decades). Weather changes quite often, but the climate in an area tends to be more constant. Winnipeg, for example, tends to have relatively cold, dry winters from November to March and relatively moist, warm summers from May to September.