

- Meteorology wasn't invented until 340 B.C. by Aristotle to try and predict the weather. Progress didn't really start until the 17th century with the invention of the thermometer in 1714 by Daniel Gabriel Fahrenheit and the barometer which was invented by Evangelista Torricelli in 1643. Using these basic instruments, scientists over the years have been able to put this data into computers to more accurately measure and predict weather. Nowadays organizations like the National Weather Service and NASA can predict weather well in advance including major weather events such as hurricanes and tornados. So much so that any electronic device is able to install an accurate weather app.

10 facts:

- Lightning is hotter than the Sun's surface. A lightning bolt can reach temperatures of up to 50,000°F (27,760°C), which is five times hotter than the surface of the sun.
- Raindrops are not teardrop shaped. Instead of the classic teardrop shape, falling raindrops are generally shaped more like a hamburger bun flattened on the bottom due to air resistance.
- The Coriolis Effect influences global wind and ocean current patterns. It causes rotating weather systems (like hurricanes) to spin counter clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.
- Tornado winds are the fastest on Earth. The highest measured wind speed, recorded by a mobile Doppler radar in a tornado, was 318 mph (512 km/h).
- Clouds are incredibly heavy. A medium-sized cumulus cloud can weigh millions of pounds (or hundreds of metric tons), due to the massive amount of water droplets and ice crystals it contains.
- The driest place on Earth is the McMurdo Dry Valleys in Antarctica, a non-polar desert region that has had no measurable precipitation (rain or snow) for millions of years.
- The coldest air temperature ever directly recorded on Earth was -89.2°C (-128.6°F) at the Vostok Station in Antarctica on July 21, 1983.
- Fog is simply a cloud at ground level. It forms when water vapor condenses near the ground, often due to high humidity and a drop in temperature.
- Thunder is the sound caused by lightning. The intense heat from a lightning strike rapidly superheats the air around it, causing the air to expand explosively and creating a shockwave we hear as thunder.
- Weather vs. Climate: Weather describes the atmospheric conditions over a short period (day to day), while climate is the average weather pattern over a long period of time, usually 30 years or more.