

# What's the difference between weather and climate?

National Aeronautics and  
Space Administration

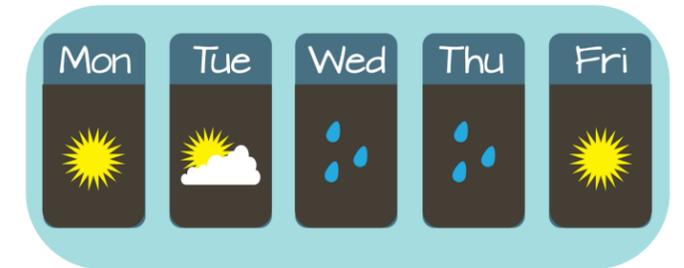
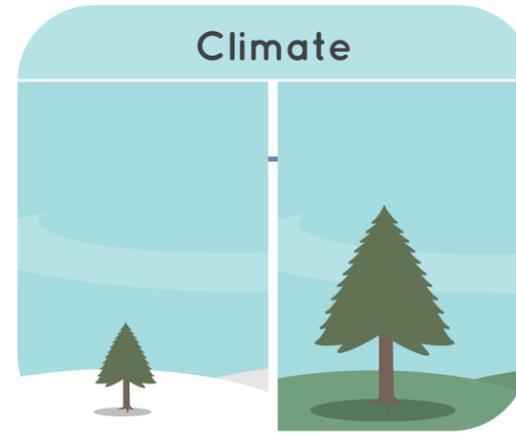


Take a look outside your window. Is it hot and sunny? Is it cloudy and rainy? Is there snow on the ground? When you look out the window, you're seeing what the weather is like today.



Weather is only temporary. For example, a blizzard can turn into a flood after just a few warm spring days.

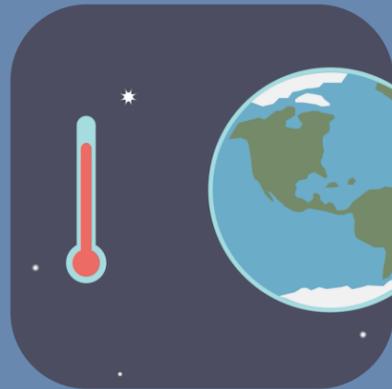
Climate, on the other hand, is more than just a few warm or cool days. Climate describes the typical weather conditions in an entire region for a very long time—30 years or more.



Keeping an eye on changing weather can help us plan ahead.



We know that if thunderclouds are forming overhead, it's probably a good idea to stay inside.



But it's important to keep an eye on changes to Earth's climate too. And NASA has observed that Earth is getting warmer.



Keeping track of Earth's sea level is one way that we can know how quickly the climate is changing.



As Earth's climate warms, ice in Antarctica and Greenland is melting. This causes the level of the oceans to rise.



NASA satellites can measure sea level rise from space.



They can also track changes in the climate by measuring the clouds. We know that changes in the number, size or location of clouds could be caused by a change in Earth's climate

NASA satellites are always orbiting Earth, looking down at our oceans and clouds. And they monitor Earth's climate in other ways too.



It's important to keep an eye on our planet and all the ways that it's changing. Right now, it's the only one we've got!

