



Climate Change

What is climate change?

Climate change describes a change in the average conditions — such as temperature and rainfall — in a region over a long period of time. NASA scientists have observed Earth's surface is warming, and many of the warmest years on record have happened in the past 20 years (climate.nasa.gov).

Literature

- How Culture Shapes the Climate Change Debate by Andrew J. Hoffman
- [Climate.nasa.gov](https://climate.nasa.gov)
- Climate Change by Bill McKibben
- The Uninhabitable Earth by David Wallace-Wells

Community Groups

- Over 50 non-profit organizations that work to stop climate change including Climate Change Action and the Climate Group.
- Facebook's "Climate CHange Information Center"
- Educational and advocate groups across social platforms
- Groups stating climate change is a hoax across social platforms

Sci-Fi References

- Interstellar (movie)
- The Martian (book with movie adaptation)
- 2012 (movie)
- The Last Winter (movie)
- Strangers in Their Own Land (book)

Evidence of Climate Change (climate.nasa.gov)

- Global temperature rise: the average surface temperature has risen 2.12 degrees Fahrenheit, with most of the warming occurring in the last 40 years.
- Warming oceans: the ocean absorbs most of the heat which plays an effect on ocean-life and melting glaciers.
- Shrinking ice sheets and Glacier Retreat: The Greenland and Antarctic ice sheets have decreased in mass, proving an increase in melting ice across the globe. Specifically, Greenland lost an average of 279 billion tons of ice between 1993 and 2019, and Antarctica has lost 148 billion tons per year.
- Decreased snow cover: There has been a decrease within the last 50 years of the amount of snowfall on the Earth, as well as evidence that snow is melting earlier than it has in the past.
- Sea Level Rise: Global sea level has risen 8 inches in the last century and has risen to double this amount within the last two decades with an increase in acceleration every year. To put this into perspective, parts of Louisiana's south, including New Orleans, are expected to be completely under water by 2050.
- Extreme events: There has been evidence of record high temperatures, record low temperatures, and an increase in intense rainfall events. These events, such as the 2016 flood in Baton Rouge, can be considered evidence that the Earth will soon be uninhabitable if things do not change.

PewResearch study about how people around the world view climate change:

<https://www.pewresearch.org/fact-tank/2019/04/18/a-look-at-how-people-around-the-world-view-climate-change/>