NATURAL CLIMATE VARIABILITY

Natural factors have **always** been causing changes to Earth's climate.

DID YOU KNOW?

A change of global average temperature of only 4-6° C separate an ice age from a warm period.

There are many natural climate determinants, including planetary, cosmic, and solar factors. These have been shaping both ice ages and warm periods over the billions of years of Earth's history.

Natural climate change is a slow change that takes place over tens of thousands of years, giving existing life forms time to evolve to new conditions.

The key determinant of temperature on Earth is its distance from the sun.

Over time, there are slight changes to the Earth's orbit and tilt on its axis, as well as changes to solar patterns, changing that distance. Also, solar variations, leading to a different temporary energy output can influence the climate. Other natural factors include changes in ocean currents and surface ice changing the reflection of sunlight.

Massive volcanic eruptions and large meteor impacts can cause abrupt changes of the climate.

CLIMATE SCIENCE LITERACY

IN SUPPORT OF THE **SUSTAINABLE DEVELOPMENT GOALS**

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