



Change in the weather and
climate in the world

Changing weather and climate are variations in the Earth's climate as a whole or of its separate regions with the passage of time, resulting in a statistically reliable deviations of parameters of weather from the multiyear averages for the period of time from decades to millions of years. Take into account changes as the average values of weather parameters, and changes in the frequency of extreme weather events. The study of climate change engaged in science paleoclimatology.



Factors of climate changes are caused by changes in the earth's atmosphere, the processes occurring in other parts of the world, such as the oceans, glaciers, as well as the effects associated with human activities. External processes that shape the climate are the changes of the solar radiation and the Earth's orbit.



A satellite view of Earth showing the Americas and surrounding oceans. The image features swirling cloud patterns over the North Atlantic and Pacific, with the continents of North and South America visible. The text "Change of weather and climate impacts on our planet now!" is overlaid on the image.

Change of weather and climate
impacts on our planet **now!**

A large glacier is melting into the ocean, with several icebergs floating in the water. The sky is blue with some clouds. The text "The glaciers are melting" is overlaid on the image.

The glaciers are
melting

Increased acidity of the oceans





Or coral reefs will
lose color

The weather is becoming
more severe





The weather is becoming
more severe

Threat to the survival of small island

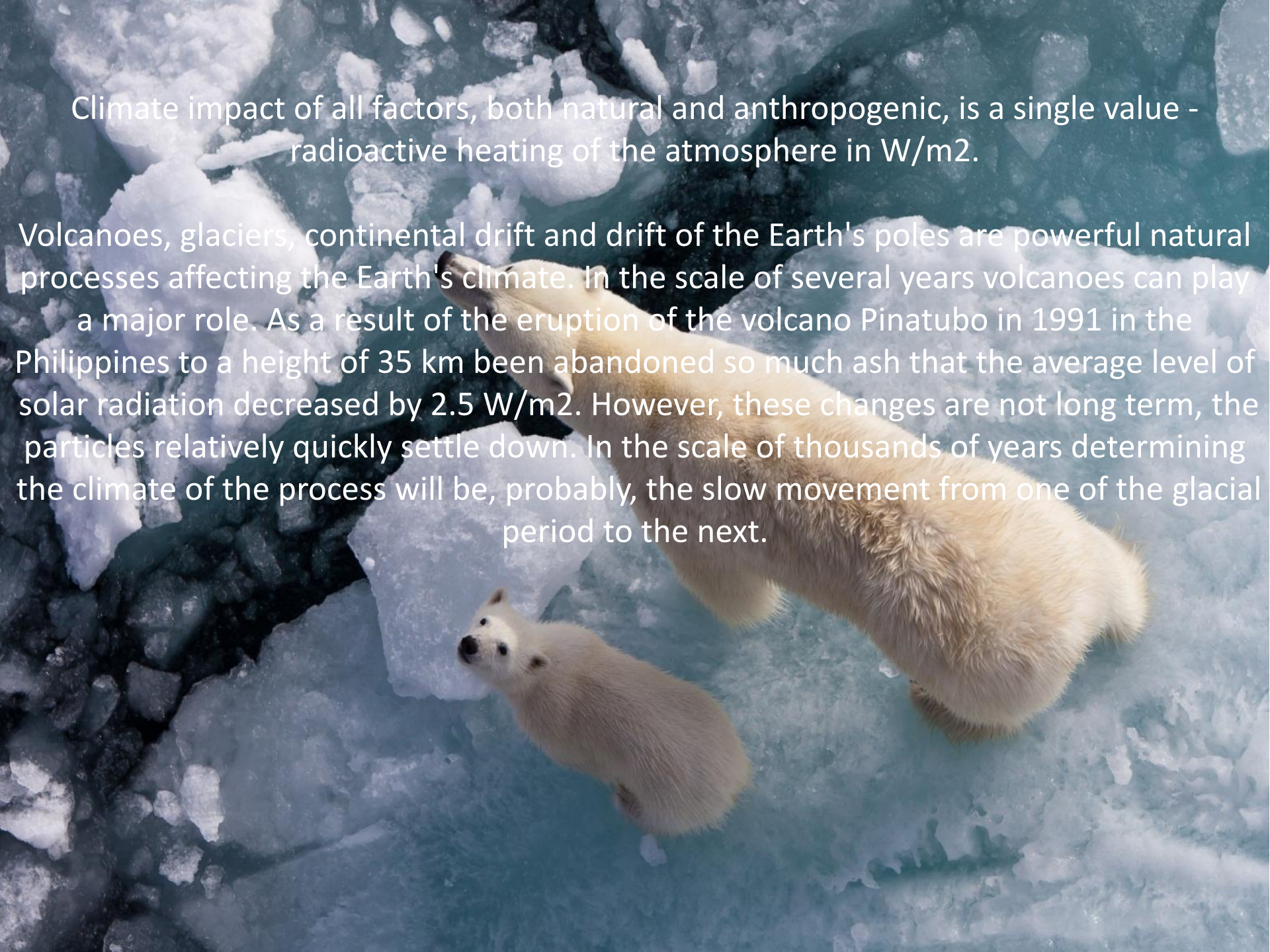


Affects the livelihood
of local residents



Climate impact of all factors, both natural and anthropogenic, is a single value - radioactive heating of the atmosphere in W/m^2 .

Volcanoes, glaciers, continental drift and drift of the Earth's poles are powerful natural processes affecting the Earth's climate. In the scale of several years volcanoes can play a major role. As a result of the eruption of the volcano Pinatubo in 1991 in the Philippines to a height of 35 km been abandoned so much ash that the average level of solar radiation decreased by $2.5 W/m^2$. However, these changes are not long term, the particles relatively quickly settle down. In the scale of thousands of years determining the climate of the process will be, probably, the slow movement from one of the glacial period to the next.

A photograph of a polar bear and her cub walking on a broken ice floe. The bear is in the foreground, walking towards the right, with her cub following her. The ice is fragmented and blue-tinted, with dark water visible between the pieces. The background shows more ice and water.

24 October - the international day dedicated to the climate action.



Thank you for your attention!

