



How ocean ice and land ice affect sea level?

Explanatory video transcript

(0:12) On our planet, we have two polar regions: In the North the Arctic, and in the South the Antarctic.

(0:23) The Arctic is an ocean surrounded by land.

(0:28) On the other side of the world, the Antarctic is a continent surrounded by the ocean.

(0:35) So, the Arctic has polar bears, but no Penguins – and the Antarctic has Penguins, but no polar bears.

(0:45) At the North Pole and at the South Pole, we have plenty of water in the solid state.

(0:51) When this water melts, will it increase the level of sea water in the same way? Let's check.

(1:07) We can observe that in the container representing the South Pole, where the ice lies on the ground, the water level has risen significantly.

(1:19) However, in the container that represents the North Pole, where the mass of ice is in the water, the water level has practically not changed.

(1:32) Thus, melting in the Arctic leads to a very small rise in sea level, as the volume of water that the ice displaces in the water is practically equal to the volume that have melted water will occupy.

(1:47) So how can we help stop the sea level from getting higher?

(1:53) Keep exploring, keep asking questions and keep being curious about the world around you.

(1:59) This could be the next investigation – don't forget that it's important for all of us to learn about these changes and take care of our planet.

