

By: [Gina White](#), Science Editor

[Sea Level Will Be Higher by 1.5 m \(5 ft\) at the End of This Century](#)

Considering ice dynamics

The sea level rise is well understood in the current conditions of global warming. Glaciers and ice sheets are melting fast. But it seems that we are largely unaware of the dimension of the phenomenon, as a new research presented at the European Geosciences Union conference in Vienna, Austria, this week, shows that by the end of this century, sea level could be by 1.5 m (5 ft) higher than now. Among other factors, this new calculation has taken into account the ice dynamics as well. "A new, more accurate reconstruction of sea levels over the past 2,000 years suggests that the prediction of an 18-59 cm (0.6-2 ft) rise by 2100 made by the Intergovernmental Panel on Climate Change is wildly inaccurate. The pace at which sea levels are rising is accelerating," said co-author Svetlana Jevrejeva of the Proudman Oceanographic Laboratory, UK. The new analysis has found a rise of 0.8-1.5 m (2.6-5 ft) higher by the next century. "For the past 2,000 years, the sea level was very stable. They rose just 2 cm (0.8 in) in the 18th century, 6 cm (2.4 in) in the 19th century and a greater 19 cm (0.6 ft) last century. It seems that rapid rise in the 20th century is from melting ice sheets," said Jevrejeva. The team pointed that the IPCC estimations did not consider the ice dynamics, as the ice sheets displace faster due to melt water, hurrying up their total melting and sea level rise. "This effect is set to generate around one-third of the future rise in sea levels. There is a lot of evidence out there that we will see around one meter (3.3 ft) in 2100," said Steve Nerem from the University of Colorado, US. The main losers in the case of the rising sea level will be African and Asian developing countries, unable to counteract because of lacking the funds for building up defense dams. For example, most of the surface of Bangladesh is within a meter above the sea level of today. "If [the sea level] rises by one meter, 72 million Chinese people will be displaced, and 10% of the Vietnamese population," said Jevrejeva.