



Sea level change during the period 1993–2006. (Data from the TOPEX/Poseidon and Jason-1 altimeter missions.)

Sea level changes reflect changes in the global ocean volume—higher sea level means that the ocean volume has increased. There are 2 primary ways in which the ocean’s volume can be changed. Melting ice that sits on land can increase the amount of water in the ocean. Also, if the waters in the ocean become warmer, the volume will increase because warm water is slightly less dense than cool water and therefore takes up more space. There are now 2 primary ways of observing these sea level, or volume, changes: through tide gauges attached to the land, or through satellite altimeters orbiting the Earth. (Graphic prepared by C. Edmisten, University of South Florida.)

