



Changes in sea level and climate due to the hydrochemical regime of the oceans

Borys Kapochkin, Valery Mikhaylov, Nataliya Kucherenko, and Anastasiya Kapochkina
Odessa State Environmental University, Odessa, Ukraine

We consider the problem of changing the acidity of ocean waters and dissolution of carbonate sediments. We consider the problem of the fall sea level during dissolution of carbonate sediments. Increased acidity of ocean waters occurs due to two processes. The first process is the dissolution in the surface waters of the ocean carbon dioxide due to the man-made and volcanic origin. The second process is the flow from the lithosphere to the bottom layers of the ocean acids and carbon dioxide. It is shown that the growth of level by increasing the volume of liquid water during melting of ice at the present stage can be compensated by increasing the volume of ocean basins, the dissolution of carbonate sediments. The effect of reducing pH on coral reefs. It is shown that coral reefs grow at the expense of the fluids from the lithosphere that have low pH and render nutrients. Corals are being degraded by the shortage and an excess of acidic fluids of the lithosphere. We consider the problem of changes the concentrations of phosphate in the waters of the ocean.