Study of Methane Fever: An Undersea Methane Explosion May Have Driven the Most Rapid Warming Episode of the Past 90 Million Years

RESHU TOMER[2] and KAMAL PANCHAL[1]
[1-2]*Inspire research group, J.V.college-Baraut (Baghpat-SNCR) India*

The explosion of methane in sea and ocean floor have create a great warming problem and caused extinction level global climate changes during the Paleocene epoch or the past go million years. Temperatures in the deep ocean soared by about six degrees Celsius. This world wide heat wave killed off a plethora of microscopic deep-sea creatures and produced a bizarre spike in the record of carbon isotopes. Some bottom dwelling creatures called foraminifera or forams, suffocated in the warmer water because it contains less oxygen than does cold water. Their hard shells were eventually buried in the seafloor muck.

Searching revealed that 55 percent of the species of deep-sea forams had disappeared from the fossil record in a blink of an eye in geologic time less than 10,000 years within the late Paleocene climate fever and also found that the shells of the surviving foams clearly recorded the carbon isotope spike.

What might have reasons the creatures to die in the first place: An explosion of methane escapes from seafloor hydrate deposits where the gas, generated as bacteria digest dead plants and animals, lies entombed in crystalline cages of ice. The gas then bubbles to the ocean surface, enters the atmosphere and begins trapping the heat that eventually warms the ocean water and suffocates the forams.

Keywords: Oceans, carbon isotopes, formas, methane hydrate, oxygen, spike