it has grown colder and more saline, and has changed its reaction from faintly acid to faintly alkaline. But a million years are little in such great slow processes, and no living thing has ever experienced appreciable change in any one of them.

Modern research in oceanography has detected surprisingly little variation in the temperature of the ocean.[1] The temperature of surface water depends upon the climatic character of the locality, but it is subject to far less variation than the temperature of the atmosphere above it, and is higher than the latter. The accompanying tables[2] indicate the nature of some of the variations in the temperature of sea water.

ANNUAL RANGES OF TEMPERATURES OF OCEAN WATER AND OF THE AIR OVER LAND

Latitude	0°	10°	20°	30°	40°	50°
Ocean	2.3	2.4	3.6	5.9	7.5	5.6
Land	—	3.3	7.2	10.2	14.0	25.4

[1] Nearly all the facts contained in the present chapter have been drawn from the following works: S. Günther, "Handbuch der Geophysik"; Arrhenius, "Kosmische Physik"; and Hann's "Climatology," translated by Ward.

[2] See Hann's "Climatology," translated by Ward, p. 135.