

Further on the Predictive Volcanic Eruption Trends: A Theoretical Approach to Geophysical Survey

Emetere Eterigho¹

¹Covenant University

Abstract

A predictive study was carried via mathematical experimentation of a conductive model capable of transmitting heat flux signal within several kilometers from the magma chamber to about fifteen centimeters below the ground surface. The expanded version of the temperature deviation curve model and temperature polynomial expansion scheme were used to estimate the time-scale of an active pre-eruption process. Satellite imagery within the timescale was used to corroborate the salient hypothesis of the mathematical process.