

1. Historians, Archaeologists geologists and geographers, all want to find a time line in volcanic eruptions. Consequently, for geographers and geologists the most pivotal questions to ask is when the eruption happened, especially those unrecorded volcanic eruptions. These dating would help the geologists and archaeologist to place the event in order on a specified chronology. Another significant use of dating an eruption is to understand about the eruption specific to a particular volcano and their impacts. So that they could have a very broad understanding of a particular volcano. Documenting these data could safeguard earth and its people from disastrous consequences from volcanoes. The accurate eruption data by geologists and geographers could help other scientists to be in agreement with other records such as: large earthquakes, Antarctic ice cores, historical Mediterranean civilisation milestones, and climatic events such as little ice age. Dating volcanic eruptions would give all concern a better understanding of association between volcanos and natural and cultural environment. By the utilization of Geochronology: geologists, geographers and scientists could discover previously unknown volcanic events. Dating the volcanic events and comparing them over long periods of time might show similarities and differences if any ,of the timing and the geological factors. This data is needed to understand the climate and the environmental past of the earth. That gives scientists a good understanding of the early earth by examining not only when something has changed also how it has changed. This could be only accomplished by careful dating of volcanic eruptions.
2. Tephrochronology is a unique method that uses volcanic ash (tephra) from a single eruption to create a sequential timeframe to understand geological, archaeological and other events. And this tool would help to identify and understand ways in which the environment and the climate of earth have been different in the past through, tephra. Moreover, tephrochronology is an age equivalent dating method providing exceptionally precise volcanic events. Such age transfers are valid because the primary tephra deposits from an eruption have the same age everywhere they occur. Tephrochronology also helps geochemical analysis which reveals volcanic and magmatic processes. In addition, the occurrences of tephra from the same eruption across sites, regions and other various sites such as: ice cores, marine, cultural hold the potential of linking causes of both environmental and cultural change. Tephrochronology advances allows in detecting macroscopically invisible objects. Furthermore, tephrochronology could be used to assemble reliable estimates of the frequency of volcanic ash clouds. These predictions would help airlines, insurance companies and people to lessen the economic losses and disruption caused by ash clouds in the future. Tephrochronology could be used to establish a detailed chronology of preoccupational and postoccupational geologic and archaeological events. Additionally this method could help make a thorough study of the changes in the climate and the effect of agriculture on ecology. Tephrochronology could be used both on land and in the sea in dating sediment sequences. And this a powerful tool in linking sediment sequences from different parts of the world together.