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The preceding seismic-volcanic activity of Santorini volcano (1600 B.C.), as a warning factor for the Akrotiri residents

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The Santorini volcano eruption that took place around 1600 B.C. is probably the greatest eruption than has ever been recorded till present. The volcanic activity created a caldera having dimensions of the order of 8x11 Km, the volcanic materials were ejected in great distances, enormous tsunami waves were generated and the Minoan civilization in Crete was destroyed.

The settlement of Akrotiri, situated in the south part of the island – volcanic cone was completely buried under the pumice formation ejected during the final phase of the eruption. Excavations have revealed that before the 16^{th} century B.C. a unique prehistoric civilization had developed in the area.

However, one of the most important questions that rise around this civilization is that, unlike in similar cases like Pompei, no human remains where found due to the volcanic activity. This is probably attributed to the fact that the settlement and the island were abandoned during the preceding volcanic and seismic - volcanic activity primary to the main eruption.

Research in Santorini has established that primary to the main eruption and the consequent burial of the Akrotiri settlement, an intense seismic activity had indeed been recorded and seismic faults were generated on the islands' surface, one of which intersected the settlement of Akrotiri.

Specifically, on the inner caldera slope, north of the Akrotiri settlement, a fault zone, which was not known till recently, was detected, having a general N-S trend, which disturbed and dissected the previous geological formations and the lower part of the Upper Pumice sequence. On the contrary, the intermediate and upper part of the se-

quence, were not affected.

The fault zone trace has also been detected within the prehistoric settlement of Akrotiri where structural elements have been affected.

In conclusion, it is suggested that primary to the main eruption the intense seismic activity and the manifestation of seismic faults on the surface provoked the evacuation of the settlement and departure of the residents, in an orderly fashion and with all their precious belongings. The main eruption followed and its products buried the entire prehistoric settlement.