

Earthquakes and Archaeology: The Catastrophic End of the Bronze Age @ 1200BC

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“Civilization exists by geological consent, subject to change without notice”

Will Durant, 1885-1981

Earthquakes have traditionally been rejected as an important agent in past collapses and destructions. In this talk I show however that from a geophysics point of view, and especially our current knowledge of earthquake geography and plate tectonics, that this rejection is unwarranted and even a bit surprising given the great archaeological puzzles we face

1. Why are there so many ruins around the Mediterranean basin?
2. Why are there so many levels of destruction in many archaeological sites (e.g., Knossos-10, Jericho-22, Armageddon-32, Troy-45)?
3. The inexplicable nature of regional destructions and system collapses.

One of the greatest collapses we know of is the catastrophic end of the Bronze Age ca. 1200 BC in the Aegean Sea and near East involving not only political and societal collapses but also the physical destruction of major capital cities such as Mycenae, Hatusas, Ugarit and Troy, and important sites such as Armageddon and Jericho.

I show how a storm of earthquakes spanning perhaps 50 years between 1225 to 1175 BC could have been in part been responsible for or has triggered this regional collapse ranging from eastern Turkey to western Greece.

Specifically I show that (1) how an “earthquake storm” could have contributed to a “systems collapse” (Renfrew, 1981, 1987; Drews, 1993) at the end of the Late Bronze Age in the Aegean and Eastern Mediterranean: (2) The physical damage to defenses, monumental buildings, and people by this “earthquake storm” could have rendered key LBZ centers vulnerable to attack by outside invaders and by indigenous or neighboring populations;

and (3) The destruction caused by an “earthquake storm” could have been the first link in a chain of events which led to the political, social, and economic “systems collapse” in the Aegean and the Eastern Mediterranean ca. 1225-1175 BC.



Figure 1. Major sites in the Aegean and the Eastern Mediterranean which were destroyed c. 1225–1175 bc at the end of the Late Bronze Age (from Drews, 1993). At sites in *italics*, destruction in the Catastrophe is probable but not certain.