



Earthquake and the Catastrophic End of the Late Bronze Age in the Eastern Mediterranean

a. nur

Amos Nur, Dept of Geophysics, Stanford University, California, USA, (amos.nur@stanford.edu)

The reasons for the catastrophic and wide spread political as well as physical collapse in the Aegean and Eastern Mediterranean areas that define the end of the Bronze age ca. 1225 BC to 1175 BC remain a major enigma. It has been attributed by historian to attacks by outsiders with the most favored group being the (enigmatic) so-called sea people. Unfortunately there is no real evidence for this. However combined geological, geophysical and archaeological evidence suggests that earthquakes may have played a key role in this extraordinary collapse during the late 13th and early 12th centuries [U+F762] [U+F763]. Based on the instrumentally recorded earthquakes occurring in the Aegean and Eastern Mediterranean region during the 20th century, several events that have clear historical information, and the geography of seismically active faults it is obvious that numerous earthquakes of magnitude 6.5 or greater (enough to destroy modern buildings, let alone those of antiquity) occurred here frequently in the past. Furthermore major earthquakes often occur in this region in groups, known as “sequences” or “storms”, in which one large quake is followed days, months, or a few years later by others elsewhere on the plate boundary fault lines. When a map of the areas in the Aegean and Eastern Mediterranean region shaken by 20th century [U+F761] [U+F764] earthquakes of magnitude 6.5 and greater and with an intensity of VII or greater is overlaid on Robert Drews’ map of sites destroyed in these same regions during the so-called “Catastrophe” near the end of the Late Bronze Age, it is readily apparent that virtually all of these LBA sites lie within the affected (“high-shaking”) areas. This would suggest that a major “earthquake storm” may have occurred in the Late Bronze Age Aegean and Eastern Mediterranean during the years 1225–1175 [U+F762] [U+F763]. This “storm” may have interacted with societal, political and economic forces at work in these areas c. 1200 [U+F762] [U+F763] and merits consideration by archaeologists and prehistorians. Similarly several other unexplained civilization collapses may also be linked to catastrophic earthquakes such as the collapse of the Casas Grandes civilization in Sonora, Mexico, and the Indus valley civilization,