Mediterranean archaeology is increasingly concerned with the impact of earthquakes on ancient monuments and cultures, as demonstrated, for example, by a conference on Archaeoseismology in 1995 in Athens. The fact that ancient Egypt was not represented indicates that Egyptologists have rarely observed or studied seismic events in ancient times. Egypt, however, located at the boundary of the African and the Arabian plates, is an earthquake-prone land. An earthquake of 1992, during which about 500 people died, is still vividly remembered.

Though ancient Egyptians mentioned earthquakes (nwr-tā), it is not as historic and real events but in a general, symbolic way. Several sites and monuments attest that disastrous seismic events occurred in pharaonic times, though, without careful archaeological observations, it is often difficult to distinguish between earthquake damage and wreckage induced by other causes, such as sagging of buildings or human quarrying activities. It is even more problematic to determine the date of a seismic incident.

Numerous severe earthquakes in Egypt are recorded from the Roman Period through the Middle Ages and in modern times. For example, a strong earthquake in the year 27 BC caused heavy damage in the Theban area, destroying, among other monuments, the upper part of the Memnon statue. Around that time the same or another earthquake destroyed the Iseum (Behbet el-Hagar). The damage was recorded later by the European traveler Paul Lucas (1664-1737). The huge pile of fallen blocks does not show heaps of debris or other traces of quarrying activity, but the temple seems to have collapsed on itself, a typical earthquake scenario (fig. 1). The same event might also have brought down the huge Delta temple of Bubastis (Tell Basta).

In a very few cases, an approximate date for an earthquake in pharaonic times can be established. For example, the huge funerary temple of Amenhotep III on the Theban west bank was apparently toppled by a powerful earthquake in the early part of the reign of Merenptah (1213-1203 BC), most likely around 1210 BC. One suspects that the nearby Ramesseum was also heavily damaged by the same seismic event, because this building was soon afterward used as a quarry to supply stones for the mortuary temples of succeeding kings. The same earthquake perhaps also triggered a rock fall that damaged the temple of Mentuhotep at Deir el-Bahari (and thereby instigating the repair work of Siptah). This temple and the nearby temple of Thutmose III were apparently finally destroyed by another rock fall in later Ramseside times. Was this also the earthquake of 1210 BC that brought down the upper half of one of the monumental statues of the pharaoh at Thebes? Further research is needed to determine the date of the event.
seated colossi of Rameses II from the façade of his rock temple at Abu Simbel.

An earlier earthquake during the 11th Dynasty seems to have destroyed the pre-11th Dynasty temple on the Thoth Hill of western Thebes, bringing about a reconstruction under Mentuhotep Seankhkare. One might assume that this earthquake occurred in the early years of that king (about 1995 BC).

Other seismic events cannot yet be accurately dated. For example, severe earthquake damage was observed at the early 4th Dynasty mastaba of Nefermaat at Meidum. The collapse of the pyramid temple of Sahure at Abusir was probably also a result of such an event: the monolithic granite columns and architraves were not smashed by stone robbers but fell in one piece, tumbling over each other, suggesting that they were knocked down by a heavy earthquake. Borchardt observed that Greek visitors’ inscriptions had been scratched onto the monument while it was still standing, which would date the collapse to an unknown later period.

In Middle Egypt, the 12th Dynasty rock tombs of el-Bersheh were crushed most probably in pharaonic times by a powerful earthquake that buried the tombs under enormous masses of collapsed rock. The Fraser tombs at Tehneh, not far away, northeast of Minsiya, were so heavily shaken that whole walls were displaced, perhaps by the same seismic event.

Collapsed ceilings of rock tombs can further be observed in many places in Egypt, such as in the Faiyum and at Lisht-South, although not all tombs were necessarily ruined by earthquakes, but by ancient quarrying activity.


\[16\] L. Borchardt, *Das Grabdenkmal des Könige Sahu-Re, vol. 1, Der Bau* (Leipzig, 1910), 105–106, figs. 42–43. Borchardt’s assumption that the fall was caused by stone robbers who started pulling out columns from the east portico is not convincing, because such a procedure would not have affected the other columns.


\[18\] M. G. Fraser, "The Early Tombs at Tehneh," *ASAE* 3 (1902), 74.

\[19\] D. Arnold, "Bericht über Fahrten in das El-Gharaq-Becken (Faiyum)," *MDAIK* 21 (1966), pl. 29a-b.