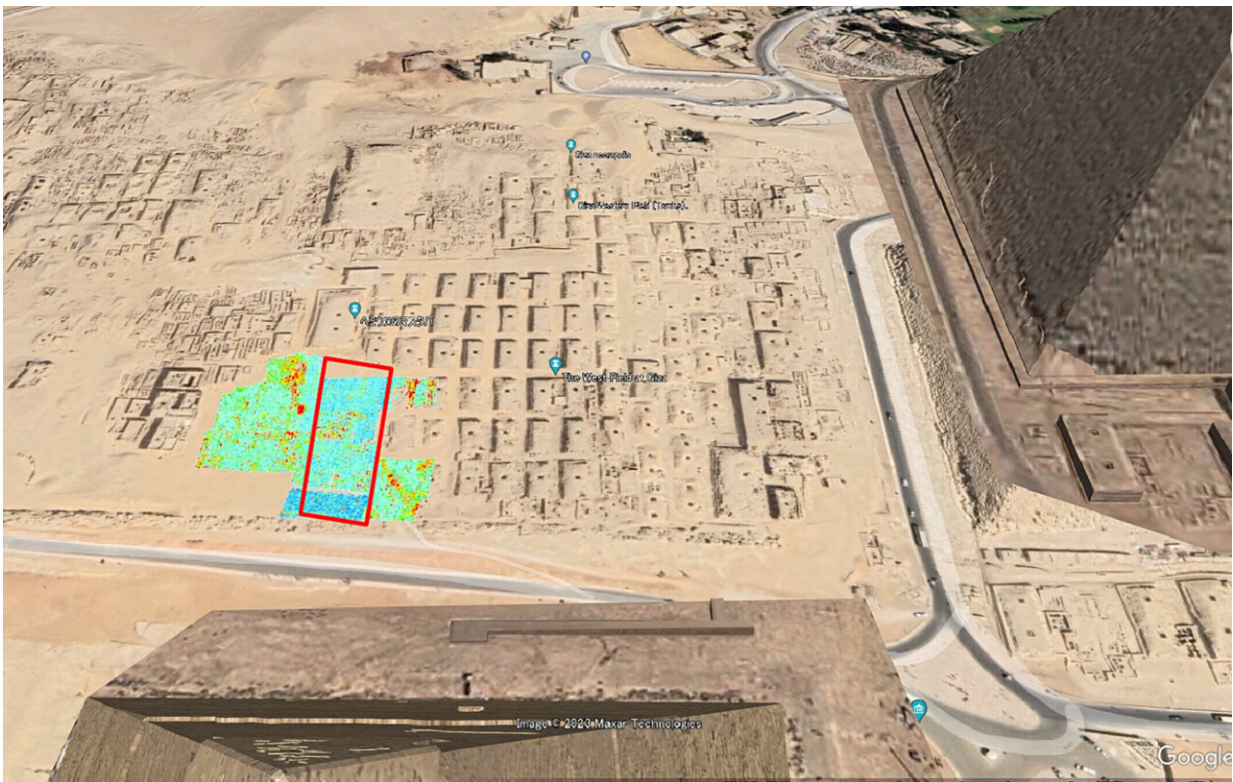


Underground 'anomaly' found near iconic Giza pyramid complex

May 15 2024, by Bob Yirka



Location of the survey area projected on Google Maps. The red rectangle shows the area of the initial survey. The color figure shows the horizontal profile of GPR. View is to the north. Credit: *Archaeological Prospection* (2024). DOI: 10.1002/arp.1940

A multi-institutional team of archaeological researchers from Japan and Egypt has discovered what they describe as an underground "anomaly" near the iconic Giza pyramid complex. In their [study](#), published in the journal *Archaeological Prospection*, the group used both ground-penetrating radar (GPR) and electrical resistivity tomography (ERT) to investigate the area beneath the Western Cemetery in Giza.

Research in Giza has been going on for hundreds of years and has led to a better understanding of the pyramids and the people who built them. Prior [research](#) has also led to the discovery of the Western Cemetery, which lies near the Great Pyramid of Giza.

Study of the [cemetery](#) has been focused mostly on mastabas, rectangular tombs made of limestone or mud, with flat roofs. But one part of the Western Cemetery has remained mostly unexplored—a flat, vacant area with no structures.

For this new study, the research team investigated whether anything was buried in that area. To find out, they conducted ground [surveys](#) using GPR and ERT.

Data from their surveys showed that there is something beneath the surface. The researchers describe it as an [anomaly](#) because its density is different from the surrounding ground. The data also showed that the anomaly was almost certainly man-made due to its shape. They could see what appeared to be two underground structures—one shallow, one deep.

The shallow structure is L-shaped and just under 2 meters deep. It measures approximately 10 meters wide by 15 meters long. They suspect its purpose was to support the construction of the larger, deeper

structure, because it appears to have been backfilled with sand. The deeper structure was measured at almost 5 meters below ground at its most shallow and 10 meters at its deepest. It was measured at 10 square meters.

The team suggests careful excavation of the site be carried out to determine the nature of the structures.

More information: Motoyuki Sato et al, GPR and ERT Exploration in the Western Cemetery in Giza, Egypt, *Archaeological Prospection* (2024). [DOI: 10.1002/arp.1940](https://doi.org/10.1002/arp.1940)

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