



## **Electrical Resistivity Tomographies on the detection of adobe buried archaeological structures in Piramide Sur in Cahuachi (Peru)**

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During the last two decades of excavations, adobe pyramids dating back from the 6th century B.C. to the 4th century A.D have been unearthed in the ancient Ceremonial Centre of Cahuachi near Nasca (Peru) by an Italian-Peruvian mission directed by Giuseppe Orefici.

One of the archaeological sectors, called sector A, has been almost excavated and restored. To complete sector A only a terraced mound named "Piramide Sur" needs to be excavated.

In order to provide useful information on the presence of buried structures and platforms as well on the geological stratigraphy a multi-scale approach based on the integration of satellite remote sensing with geophysical techniques was employed.

Such investigations were carried out by the Italian mission ITACA, funded by the Italian Ministry Affairs and composed of researchers of two institutes of CNR (IMAA and IBAM), which provides a scientific support for archaeological research, since 2007.

In particular, the subsurface features were investigated by Geoelectrical prospecting, performed by using a georesistivimeter for tomography which observe the resistivity value along sections. Several tomographies were carried out to investigate the shallow and deep structure of the pyramid both along the main flank at Nord and on the top. Finally, the integration of all data acquired by the different remote sensing techniques allowed for spatially characterizing the archaeological features, thus providing important information for the planning of the next archaeological campaign.