



## **MAGNETOMETRY ON THE GEOGLYPHS OF PALPA AND NASCA (PERU)**

**Jörg W.E. Fassbinder** (1), Markus Reindel (2)

(1) Bavarian State Dept. of Historical Monuments, Archaeological Prospection POBox 100203, D-80076 Munich, Germany (joerg.fassbinder@blfd.bayern.de), (2) Deutsches Archäologisches Institut, Kommission f. Allgemeine u. Vergleichende Archäologie (KAVA), Endenicher Str.41, D - 53115 Bonn, Germany (reindel@kava.dainst.de)

The legendary geoglyphs of Nasca and Palpa belong to one of the great mysteries of archaeology. They are found in an area of more than 100 square kilometers between Nasca and Palpa. Partly some kilometer long trapezoids as well as pictures of animals were traced in the desert. It was assumed that they were designed for religious purposes simply by removing the black stones from the ground of the desert and thereby generating a bright area of sediments, well visible from the air.

So far, magnetometry was rarely used in South America. We found the magnetic inclination  $< 15^\circ$  and an intensity of the total Earth's magnetic field of less than 24.000 nT. These conditions requires further adaption of the highly sensitive total field Cesium magnetometer.

The most sensational finding was the discovery and verification of archaeological structures in the area of the trapezoid geoglyphs. The magnetogram shows the remains of buildings as well as pits and other archaeological structures, within the linear structures of the trapezoid shaped geoglyphs. This finding sheds new light on the understanding of the Nasca Culture (200 BC - 600 AD). As a consequence, these structures can no longer be interpreted as airstrips for the extraterrestrials as it was proposed by amateur archaeologists.