

# PATTERNS, PROCESSES & UNDERSTANDING:

historic aerial photographs for landscape studies

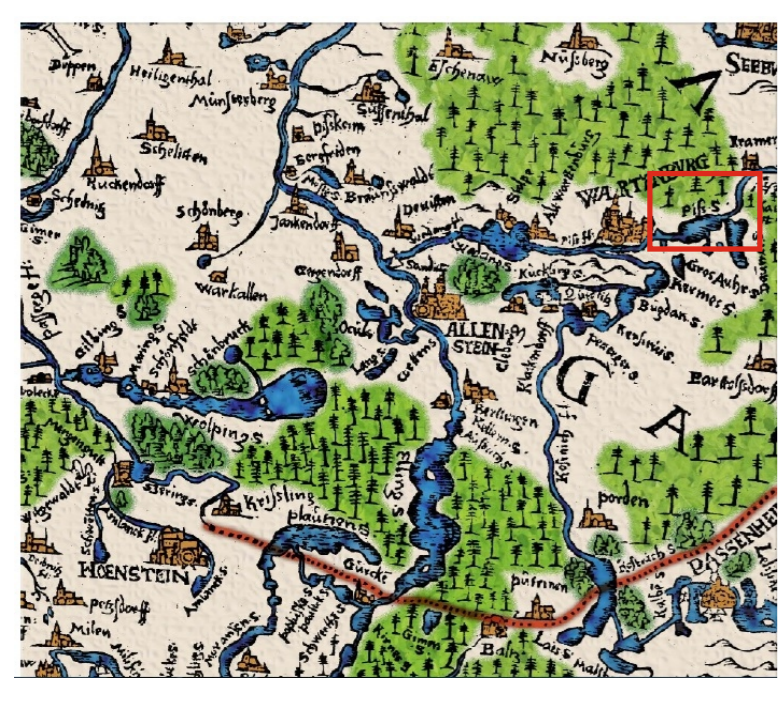
## Poznan-Bedlewo, Poland

24-26 April 2014

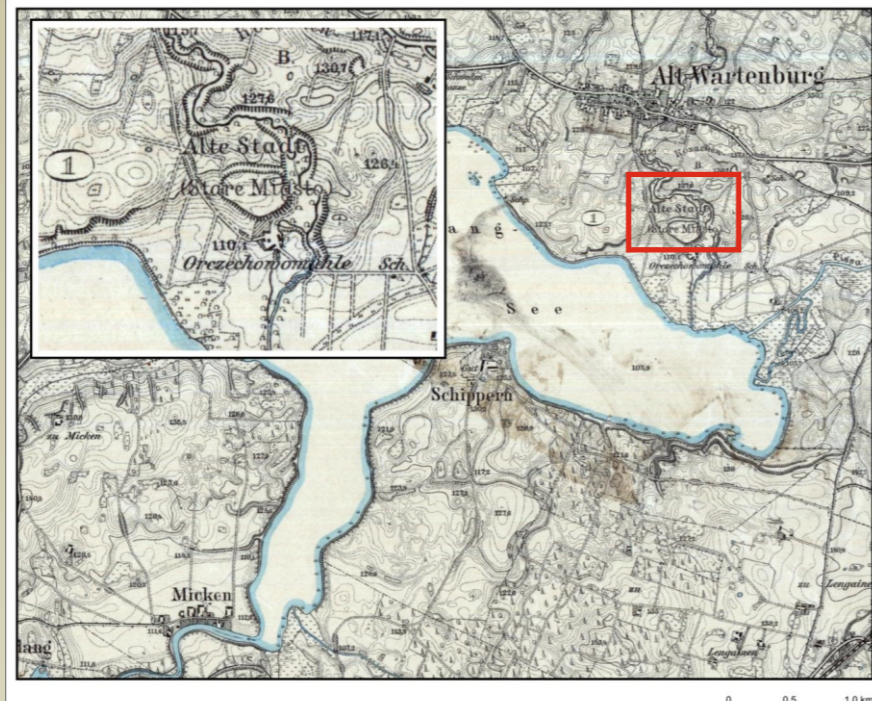
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 Arkadiusz Koperkiewicz, University of Gdańsk, Department of Archaeology  
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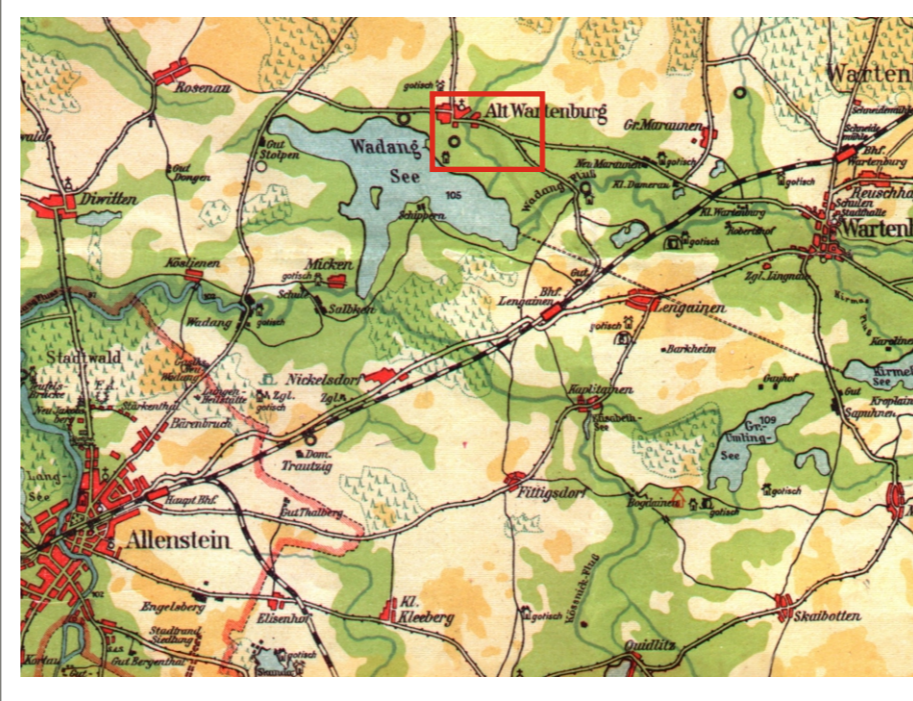
# PRELIMINARY RESULTS OF NON-DESTRUCTIVE STUDIES ON FORTIFIED SETTLEMENT IN BARCZEWKO, NORTH-EASTERN POLAND



Hennenberger, 1576



Messtischblatt 1:25 000, 1915



Steffel, Fromm, 1941

The village of Barczewko (*German: Alt Wartenburg*) is located in north-eastern Poland, within the historical borders of Warmia. The medieval chronicles report that in 1325 Bishop Eberhard founded the castle (and the city ?) which were destroyed in 1354 during the invasion of Lithuanians. In 1364, the town of Barczewo was relocated into its present place.



Photo from resources CODGiK 1969

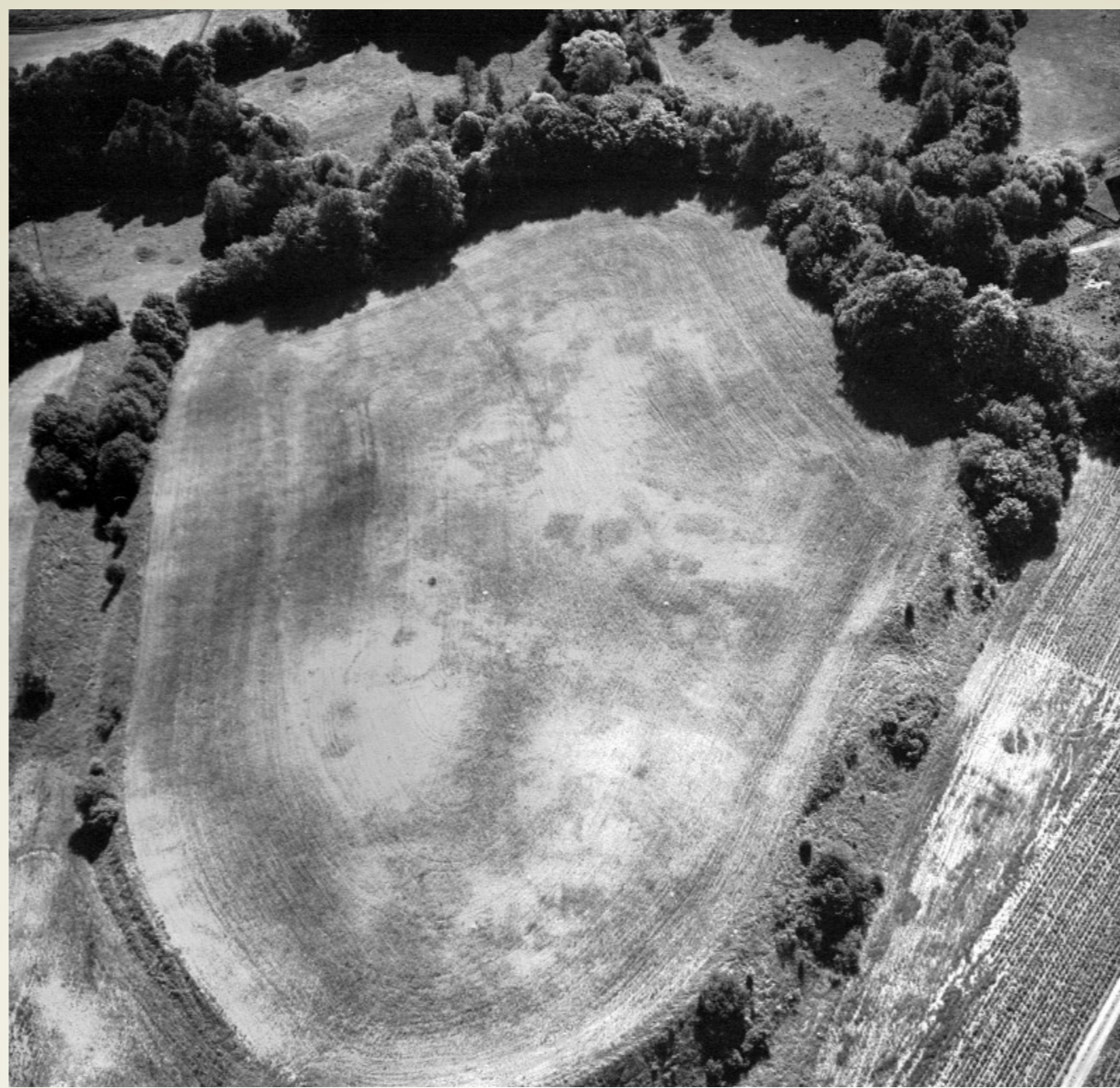


Photo by J. Miałdun 1993



Photo by J. Miałdun 2008

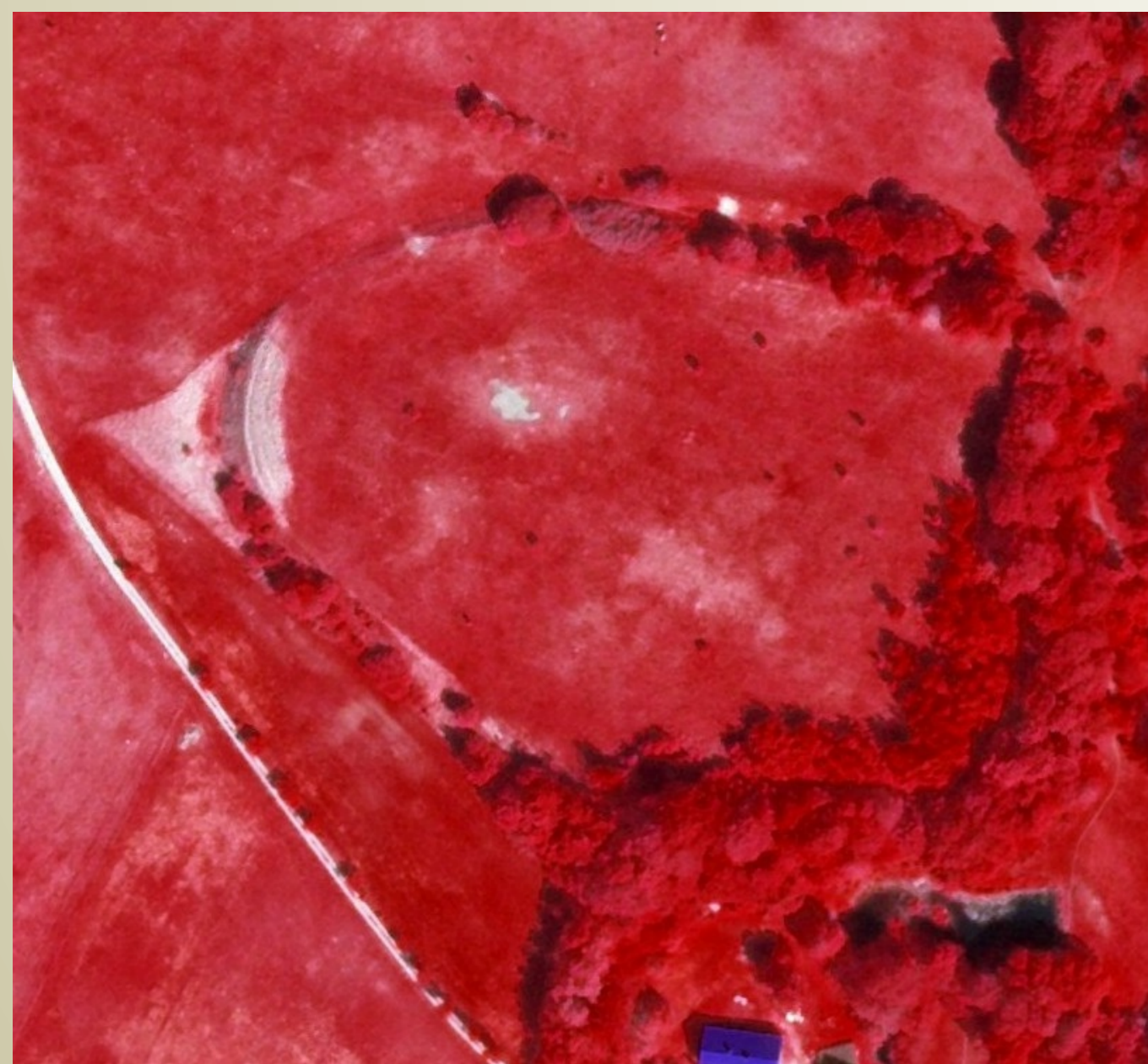
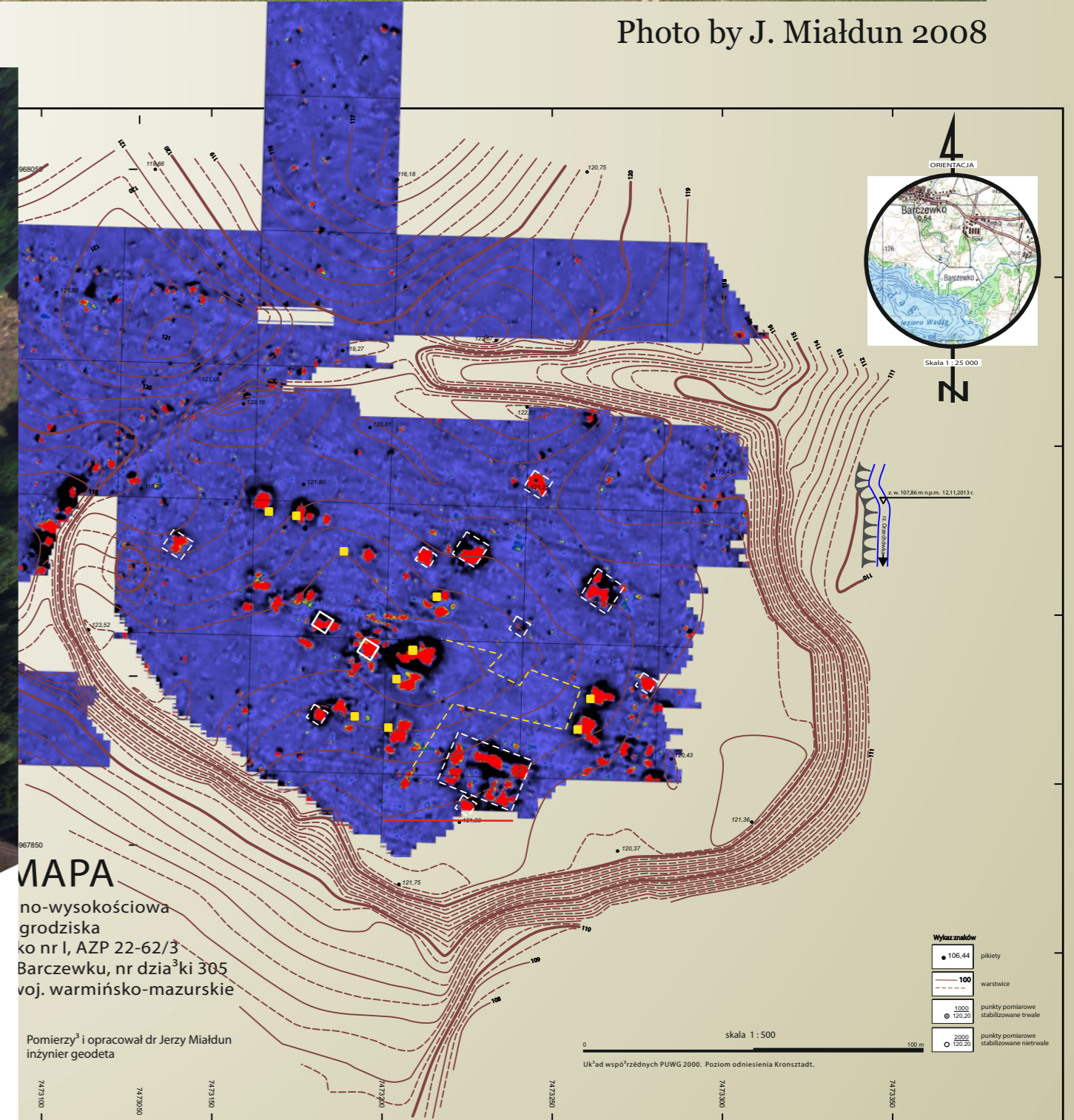
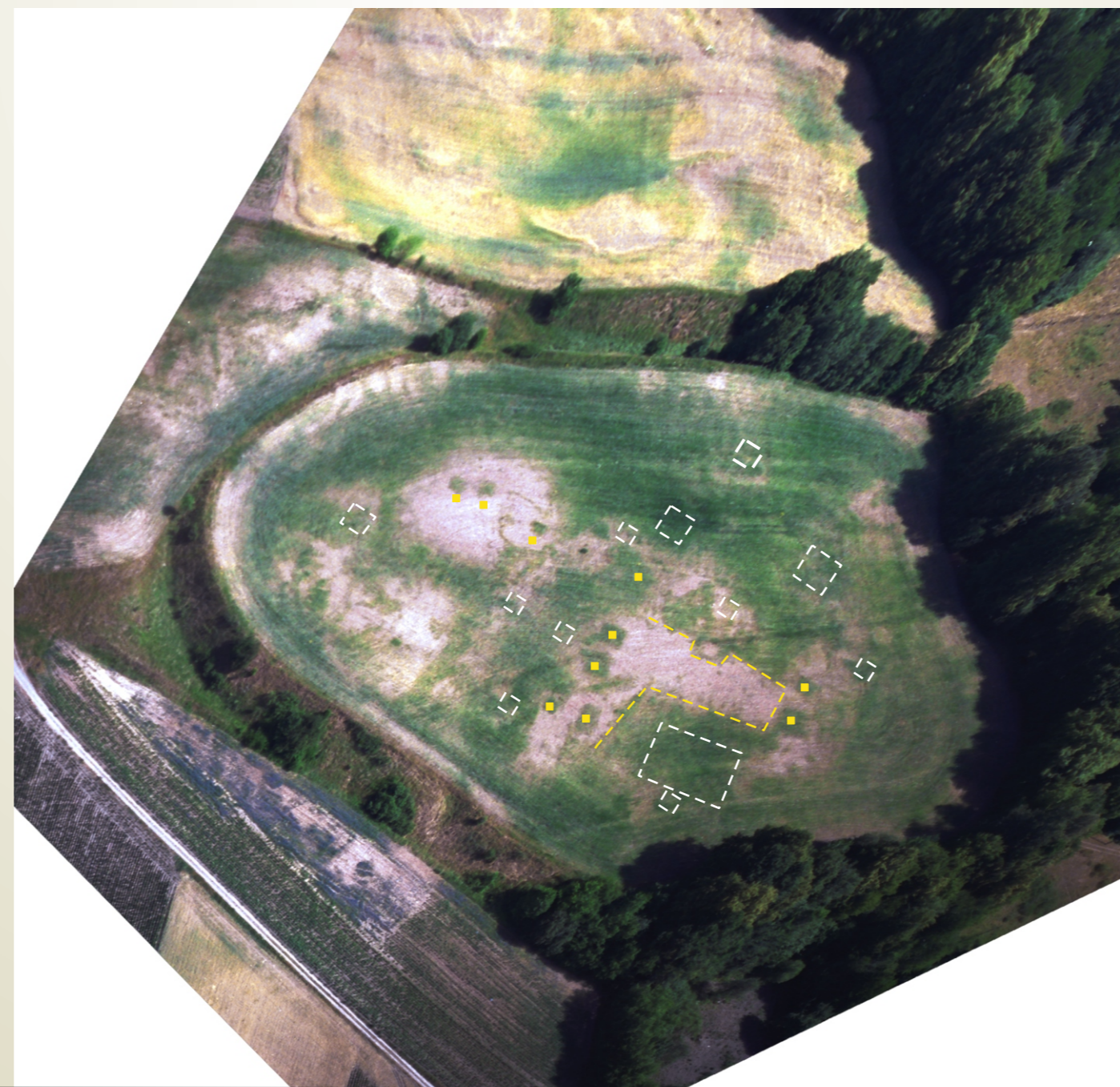


Photo from resources CODGiK 2013



Comparison of aerial photos (by J. Miałdun 1993) and geophysical surveys (prepared by P. Wroniecki 2013). Identification of similar structures, prepared by A. Koperkiewicz

By the Orzechówka river, near the lake Wadąg there is a settlement which, in local tradition, was called Stare Barczewko (Alt Wartenburg), Stare Pole (Alt Feld) or Stare Miasto (Alt Stadt). For many years scientists have asked themselves a question whether it can be identified with the town mentioned in the sources. In 2013 a Polish - German project "Alt Wartenburg - Warmian Pompeii" was launched. Its main objective is to perform a number of non-destructive testing. In the series of archival aerial photographs we can observe the transformation of the environment around the site and the subsequent stages of its development. Aerial photographs of the place taken in 1993 had their considerable significance. Favorable conditions allowed to document the distinguishing features of vegetation indicating the existence of anthropogenic relics, arranged in an organized structure. Archival, geodetic, geological and geophysical surveys have been carried out. Visualising geomagnetic data helped to understand a system of anomalies visible in the aerial photographs. It resulted in drawing a map where specific objects can be identified. You can see a regular, measured development, communication routes with relics of buildings and a central, rectangular 50 x 40 m square (marketplace?). The observation on the east side has been disturbed by vegetation, systematically overgrowing the area since the discontinuation of farming. As a result, it can be assumed that we are dealing with a well-preserved spatial layout of a "city" functioning only for three decades of the fourteenth century.



Photomap based on an aerial photo of 26.11.2013 as an example of strong human pressure and activities, prepared by J. Miałdun