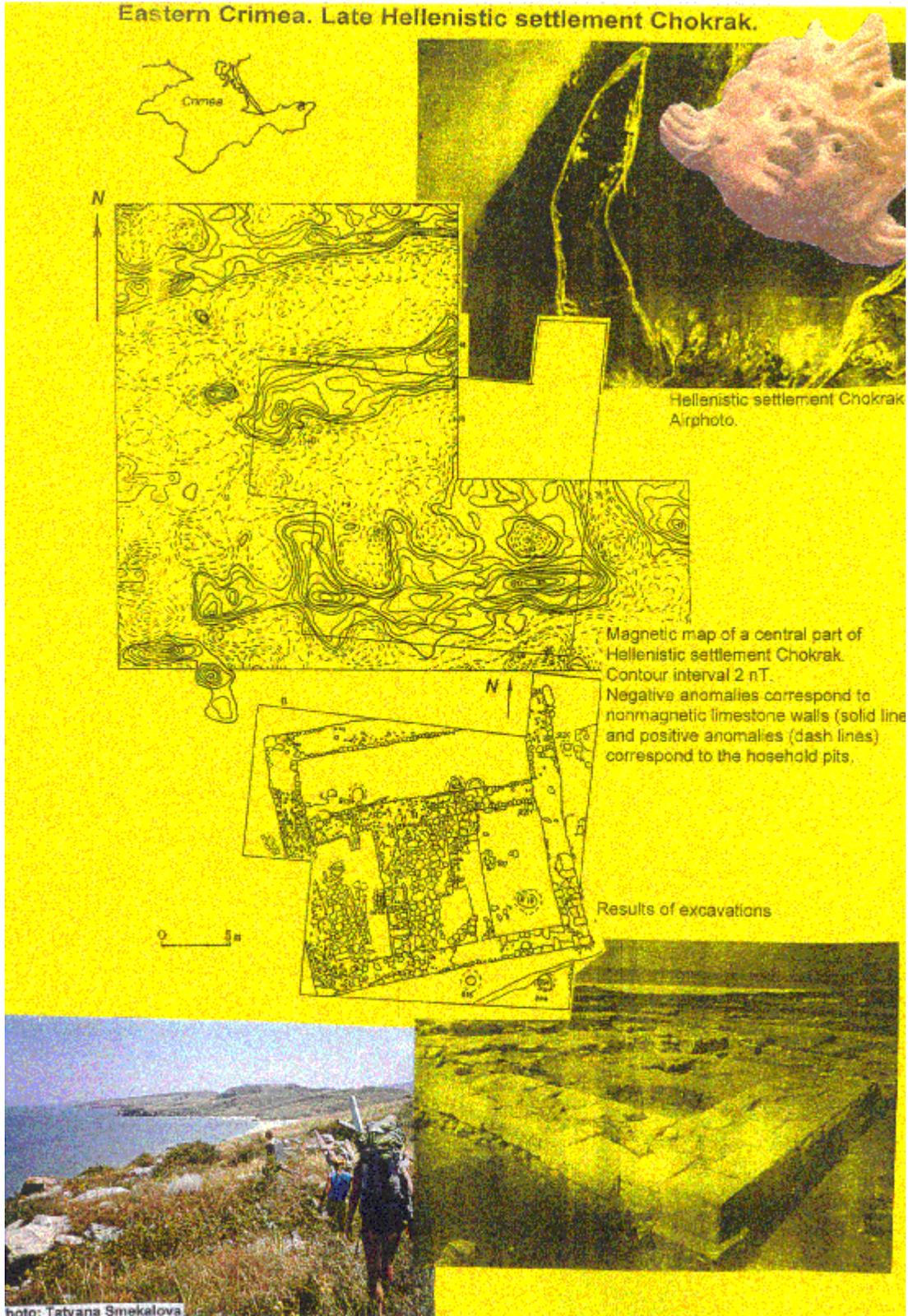




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MAGNETIC SURVEY OF ANCIENT FORTIFICATIONS

Eastern Crimea. Ancient Greek fortifications.

Photo: Sergej Smekalov

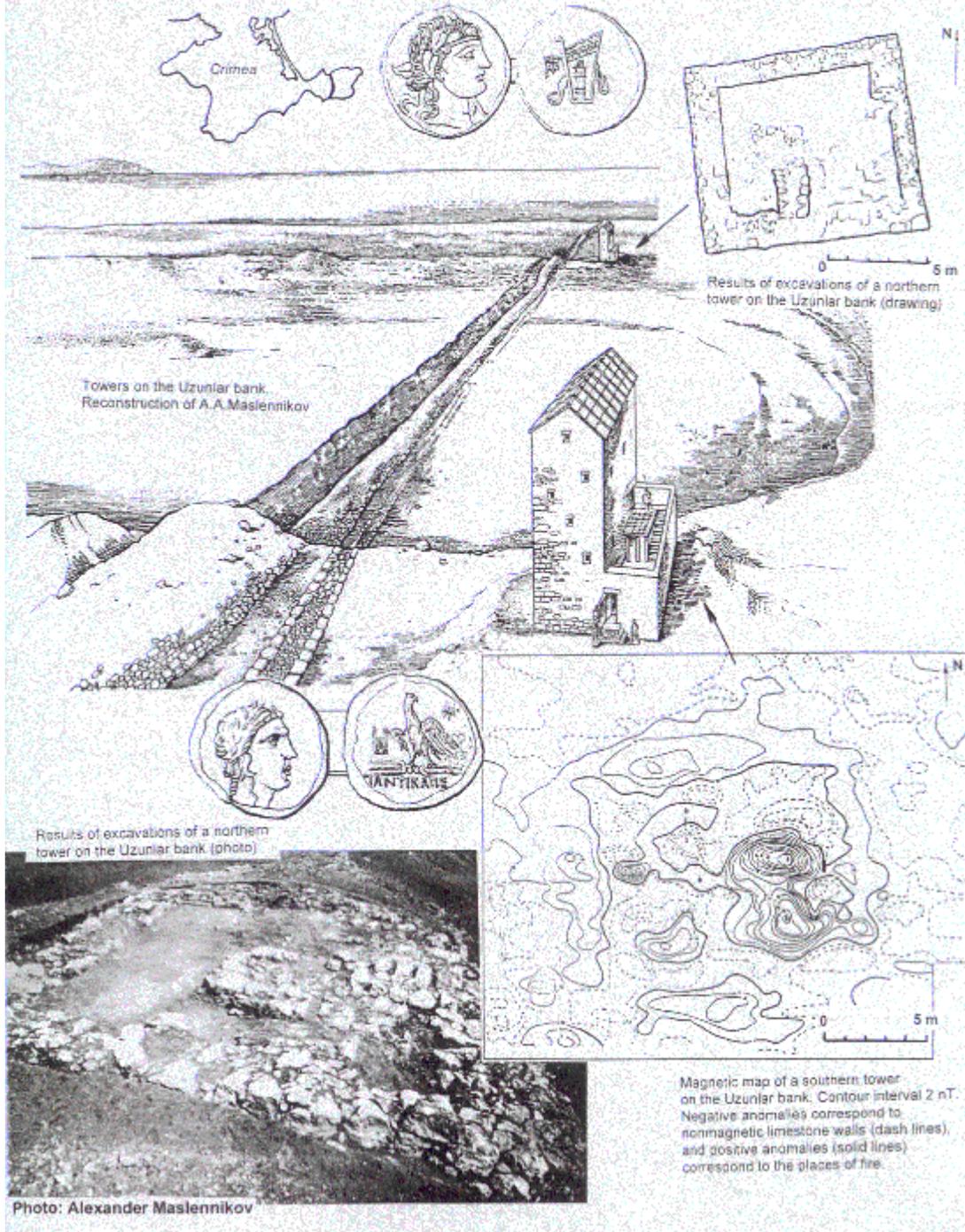
Photo: Sergej Smekalov

Eastern Crimea. Ancient Greek fortified settlement General'skoe.
Top: Magnetic map. Scale 1:1000.
Contour interval 2 mT.
Long negative anomaly is from a bank of nonmagnetic limestone (dash lines) and positive anomaly (solid lines) from a ditch, filled with magnetic topsoil.
Bottom: results of excavations

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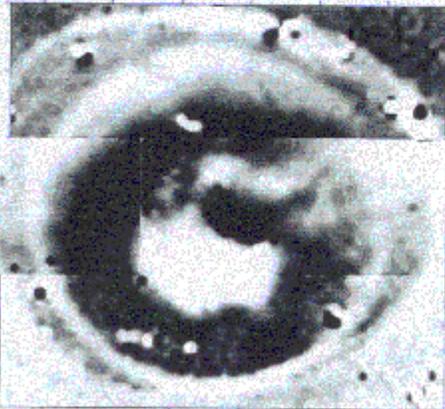
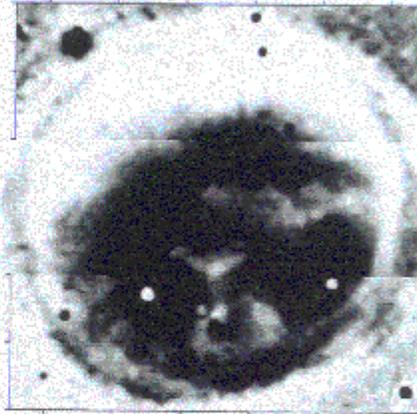
Eastern Crimea. Uzunlar bank

The Uzunlar bank crosses Kertch peninsula from the North to the South. Several hills, which are situated close to the bank were surveyed with magnetometer to know if they are ruins of towers or barrows. In case if there was a tower, the magnetic maps should clearly show the negative anomalies of rectangular shape, which correspond to nonmagnetic limestone walls. Almost all of the towers perished in fire, therefore there are strong positive magnetic anomalies from clay floor, which was magnetized under the high temperatures.



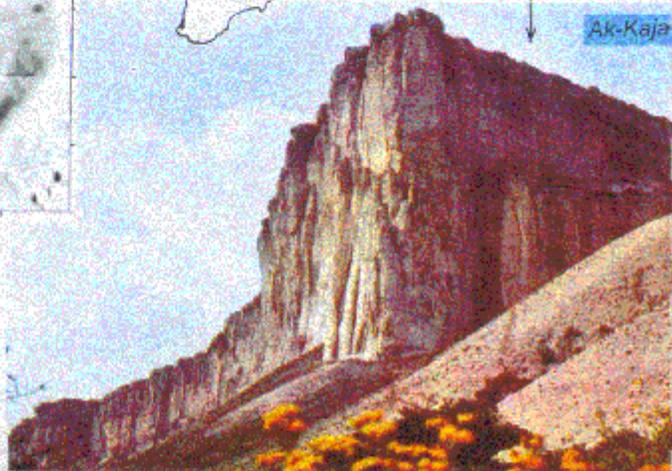


Krim. Plateau Ak-Kaja. North of the town of Belogorsk. Big Scythian Barrows (N1 and 2). Diameters ca 50 m, height ca 9 m. Magnotic map. Scale 1:800. Inner white circle means limestone wall (cromlech). The dromoses start from East side (light colour). White or dark areas in the center correspond to the chambers, which are either only partly destroyed or completely destroyed and filled with more magnetic than limestone soil.

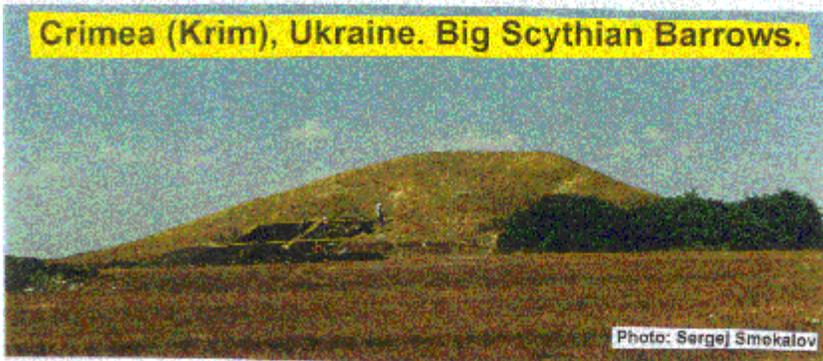


Scythian barrows are over there

Ak-Kaja

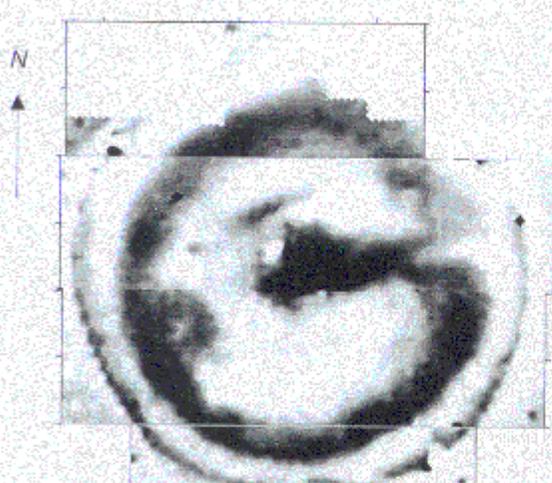


Crimea (Krim), Ukraine. Big Scythian Barrows.



Krim, Ak-Kaja.
A Big Scythian Barrow (N4).
Diameter of the barrow was 5
height was 9 m.
Beginning of the excavations
after magnetic survey in 1987.
View from the E-N side, from
supposed dromos.

Photo: Sergej Smekalov



The dromos and the central chamber
of the barrow in the process of excavation.
The depth of the floor of the chamber is
7 m below the modern surface.

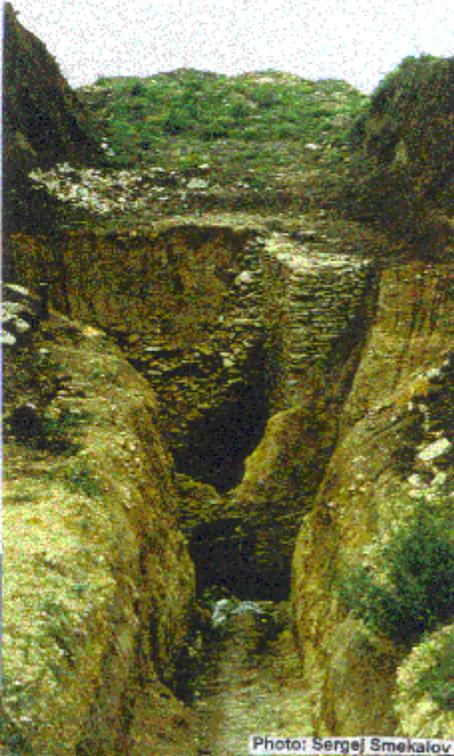


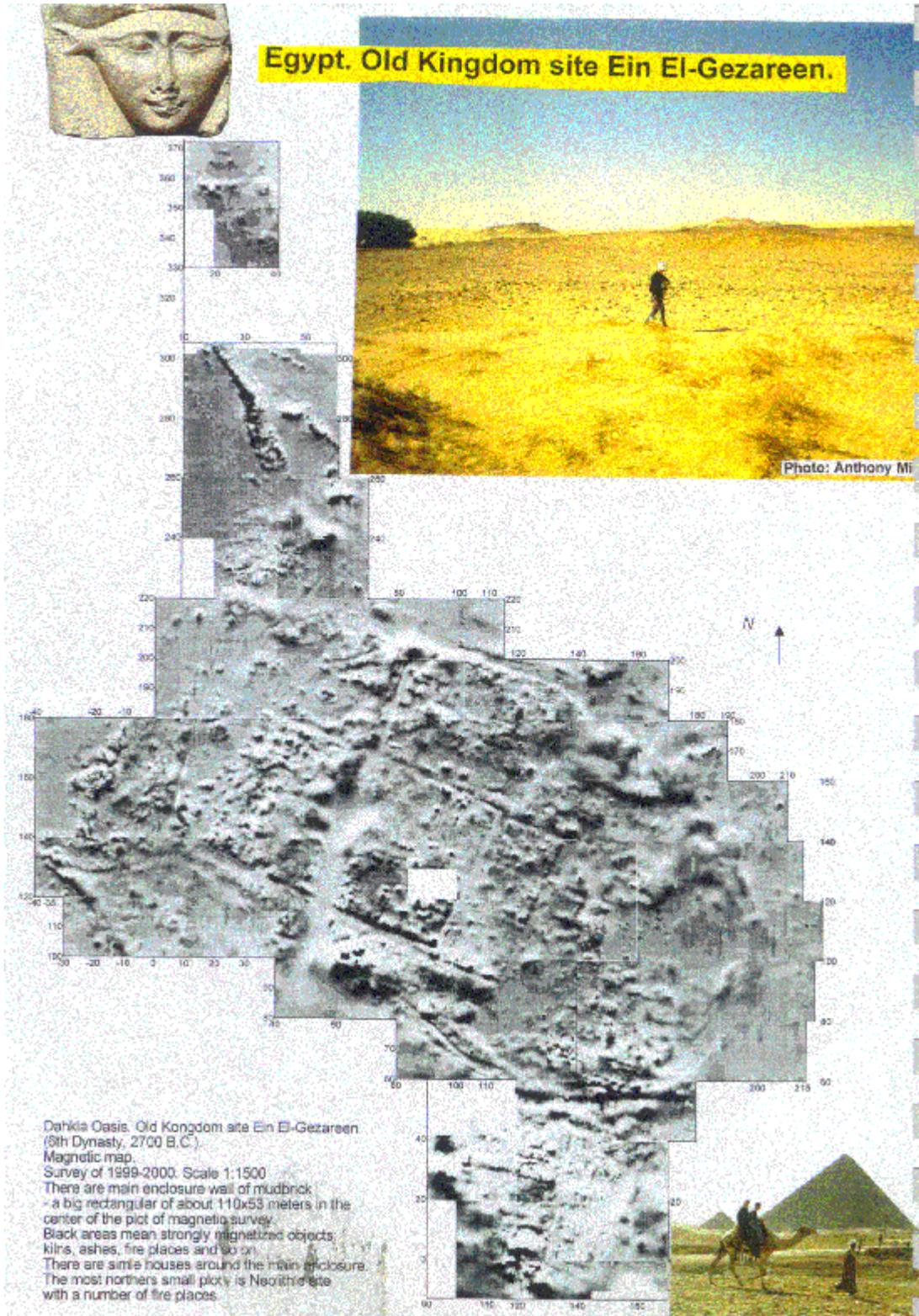
Photo: Sergej Smekalov

Krim, Plato Ak-Kaja. Magnetic map of the Big Scythian Barrow (N4),
the photo of which is above. Scale 1:800.
Inner white circle means limestone wall (cromlech).
The dromos is visible very well, it starts from E-E-N side
(light colour). Dark area in the center marks the chamber,
the ceiling of which is almost completely destroyed by robber's pit.



Beginning of
the excavations
from the eastern
part of the barrow.
Limestone wall,
surrounded
barrow.

Photo: Sergej Smekalov



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Egypt. Dakhla Oasis. Roman town Kellis.

Photo: Tatyana Smekalova

Photo: Tomas Herbic

Magnetic map of 1998.
Kellis. Industrial quarter.
Each square is 20x20 m.
Dark spots mean strongly magnetized objects:
furnaces, kilns, heaps of slag.
The marked area was excavated in 2000: there was a smithy with two kilns.

Photo: Tatyana Smekalova

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