

# The Fourth National Mars Science Seminar

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## *Mapping features potentially related to glacio-volcanic activity in Utopia Planitia, Mars*

**BSc Magdalena Baranowska**  
**Adam Mickiewicz University**

Utopia Planitia is major depressions in Northern Plains, filled with Hesperian and Amazonian fluvial and periglacial sediments. The basin is covered with structures related to water presence like channels, polygons, thumbprint terrain or buried craters. Some of the observed structures still do not have a defined origin and might have been related to the endogenetic origin. Here we show distribution and properties of a previously not mapped feature with an unknown origin present within a NW sector of Utopia: low elevation mounds. We mapped 131 low elevation mounds identified. Their diameter ranges between 1 km to 7,3 km and have height from 5 to 65 m. Morphologically low elevation mounds can be divided into 3 types: Fractured mounds with distinct crack at the top of mound; Cratered mounds, with summit covered with sub-circular features; Smooth mounds, covered with dark material, do not show any particular features on their surface. Low elevation mounds resemble pingos or mud volcanoes.



JAGIELLONIAN UNIVERSITY  
IN KRAKÓW

Faculty of Physics, Astronomy  
and Applied Computer Science  
Faculty of Geography and Geology